

**Exploring the effectiveness of evidence-based methods to
measure and improve offenders' engagement in treatment.**

Student ID: 4240974

Seyed Mohammadmehdi Alemohammad, B.Sc., M.Sc.

Thesis submitted to the University of Nottingham for the degree of
Doctorate in Forensic Psychology
(May 2017)

Overall Word Count: 33947 (excluding appendices)

Abstract

Treatment non-engagement in forensic settings is a major problem, which has been associated with increased recidivism and higher costs. This thesis aimed to evaluate existing methods of enhancing engagement, test an innovative motivational strategy to enhance engagement, and critically evaluate an effective measurement of engagement. Firstly, a systematic review and a meta-analysis of Randomised Controlled Trials (RCTs) was conducted to evaluate the effectiveness of Motivational Interviewing (MI). It was concluded that MI may be effective for engagement, but measurement of engagement is inconsistent and unreliable. Therefore, MI was integrated into a novel training package for staff in addition to a promising readiness model and a motivational assessment. The feasibility of such intervention was investigated for probation staff, and its preliminary effect on probationers' group engagement was assessed using the Group Engagement Measure (GEM-27; Macgowan, 1997). Findings showed while it is generally feasible to implement such an intervention, it is possible that short training in such settings might not be as impactful due to organisational issues, staff burnout and external influences. However, GEM-27 showed promise with regards to being able to measure offender engagement. After critically reviewing its characteristics, with further research and modifications, it was concluded GEM could be widely used in forensic settings. In conclusion, advancements in evidence-based measures of engagement and forensic specific strategies to enhance offender engagement are the initial steps towards developing a comprehensive theory of offender engagement and increasing treatment effectiveness.

Overview

In Chapter 1, a broad review of the previous literature on treatment engagement is provided and similar terminologies are defined and their relevance discussed. Subsequent to discovering the endemic nature of treatment non-engagement in forensic settings, as well as difficulties measuring such construct, the purpose of this research was to review and test various strategies to measure and enhance engagement.

In Chapter 2, MI is a popular method for enhancing treatment engagement. However, since its effectiveness has not previously been reviewed quantitatively with an offender population, both a systematic review and a meta-analysis was conducted. In order to understand where MI has its impact, outcome measures such as alcohol consumption, substance misuse, recidivism, and treatment engagement were included. Results showed that MI is not effective in relation to substance misuse or recidivism, and might in fact increase alcohol consumption. Engagement measures could not be entered into the meta-analysis due to poor measures and missing information. However, systematic review findings for engagement showed that MI could improve treatment engagement.

In Chapter 3, MI, in addition to other promising strategies to enhance engagement, were integrated into a training package. The aim was to evaluate whether it would be feasible to deliver this training to programme facilitators in probation, an area where non-engagement is a significant problem. A secondary aim was to investigate whether training could enhance engagement of probationers in a group programme.

Results showed that carrying out a larger RCT would be partially feasible, though the short nature of the training might not necessarily provide the expected results when staff are already burnt out and resources are scarce. However, a standardised measure of engagement (GEM-27) showed promise in terms of being able to detect different aspects of engagement and therefore providing a more reliable and sensitive result.

In Chapter 4, the GEM-27 was critically evaluated in terms of its psychometric properties and applicability to forensic settings. The measure has shown to be reliable and valid. Importantly, it recognises the multidimensionality of engagement and is good at differentiating from other related outcomes. However, more research is needed to establish its effectiveness in relation to the offender population and major reformatations need to be made to the tool itself to reach its maximum potential.

Finally in Chapter 5, it was concluded that it is important to utilise validated measures of engagement, as they would inform practitioners to intervene at the right time and would result in better research (i.e. conducting a meta-analysis). Secondly, overreliance on improving staff competencies could be due to convenience as it is more difficult to confront organisations and other influential external factors. The research also highlighted the importance of using qualitative feedback to gather information with regards to such factors and to infer the feasibility of conducting future studies. It is important to think about individual's readiness to engage, organisational support, external factors and staff competencies simultaneously in order to increase offender engagement.

Acknowledgements

I am forever grateful to my parents for making my education possible; they continuously and unconditionally supported me, both emotionally and financially. I am forever in your debt.

I would like to thank my supervisor, Dr Katy Jones for her guidance and support. You helped me explore problems from different perspectives and encouraged me throughout this project. I appreciate your friendliness and your genuine support.

Similarly, I appreciate Professor Mary McMurran's support, for her early contribution towards the development of the design of the RCT and for sharing her expertise in the field of treatment engagement.

This also extends to Professor David Daley, who shared his wisdom and expertise on conducting the meta-analysis and was willing to meet me on several occasions to discuss the research.

This project became much more enjoyable with the presence of my best friend, Jayne Corson, who supported me emotionally and intellectually throughout this course.

Finally, this project would not have been possible without the co-operation of the friendly probation staff; thank you for participating in this project despite your heavy workload. I would also like to thank the men who agreed to participate in this study. I wish you all the best.

Statement of Authorship

I declare that this thesis and the work presented in it are my own and have been generated by me as the result of my own original research.

Table of Contents

Abstract.....	2
Overview.....	3
Acknowledgements.....	5
Statement of authorship.....	6

Chapter One – General Introduction

Background.....	12
Problems with defining, measuring and researching engagement.....	13
Strategies to enhance engagement.....	15
Targeting the gap in research.....	17

Chapter Two - The effectiveness of motivational interviewing with offenders: A systematic review and meta-analysis of randomised controlled trials.

Abstract.....	20
Introduction.....	21
Method.....	25
Results.....	30
Discussion.....	54
Conclusion.....	63

Chapter Three - Does training staff in motivational techniques improve probationers' engagement in the Thinking Skills Programme? Feasibility, acceptability and outcomes for a probation staff training intervention.

Abstract.....	66
---------------	----

Introduction.....	67
Method.....	75
Results.....	91
Discussion.....	102
Conclusion.....	114

Chapter Four - A critical evaluation of the psychometric properties and clinical utility of the Group Engagement Measure (GEM) in forensic settings.

Introduction.....	117
Psychometric properties of the measure.....	122
Applicability to forensic settings.....	132
Clinical Utility.....	135
Conclusion.....	137

Chapter Five – Discussion.....	139
Conclusion.....	146
References.....	149

Appendices	184
-------------------------	-----

List of Appendices

Appendix One – Inclusion/exclusion criteria for the systematic review...	184
Appendix Two – List of excluded studies and reasons for exclusions.....	186
Appendix Three – Participants’ consent forms (facilitators).....	188
Appendix Four – Participants’ consent forms (probationers).....	189
Appendix Five – Participants’ information sheet (facilitators).....	190
Appendix Six – Participants’ information sheet (probationers).....	195
Appendix Seven – Faculty of Medicine and Health Sciences Research Ethics Committee (FMHS REC).....	199
Appendix Eight – London Community Rehabilitation Company (CRC) ethical approval letter.....	201
Appendix Nine – Rehabilitation and Innovative Solutions Enterprise (RISE) support letter.....	202
Appendix Ten – Facilitators’ demographic questionnaire.....	203
Appendix Eleven – Pre/Post training knowledge questionnaire.....	204
Appendix Twelve – Motivational training slides/exercises.....	206
Appendix Thirteen – Training evaluation form.....	235
Appendix Fourteen – Facilitators’ interview questions.....	237
Appendix Fifteen – Facilitators’ interview transcript.....	238
Appendix Sixteen – Facilitators’ debriefing sheet.....	241
Appendix Seventeen – Probationers’ debriefing sheet.....	243
Appendix Eighteen – Facilitators’ Group Engagement Measure.....	244
Appendix Nineteen – Probationers’ Group Engagement Measure.....	247
Appendix Twenty – Research Conference Presentation Slides.....	250
Appendix Twenty-One – BPS DFP Conference Abstract (accepted).....	267
Appendix Twenty-Two – Interview Transcript Analysis.....	268

List of Tables

Chapter Two

Table 1- Characteristics of the included RCTs.....	32
--	----

Chapter Three

Table 1 – Demographic characteristics of facilitators.....	91
Table 2 – Demographic characteristics of probationers.....	92
Table 3 – Facilitators’ ratings of the training after the training/TSP were completed.....	94
Table 4 – Engagement outcome of the TSP group sessions.....	99
Table 5 – Correlation matrix between engagement and demographic variables.....	101

Chapter Four

Table 1 – List of studies evaluating GEM’s psychometric properties.....	123
--	-----

List of Figures

Chapter Two

Figure 1 – Flowchart showing the selection of trials.....	30
Figure 2 – Risk of bias' graph: review authors' judgments about each risk.....	44
Figure 3 – Risk of bias' graph: review authors' judgments about each risk of bias item presented as percentages across all included studies.....	45
Figure 4 – Funnel plot showing the effectiveness of MI on reducing alcohol use, substance use/misuse and recidivism.....	53

Chapter Three

Figure 1 – Staff training and engagement in TSP flow chart.....	90
---	----

Chapter 1 - Introduction

Background

Over the past few decades, there has been a significant shift away from focusing on punishment to rehabilitation of offenders with the hope to reduce recidivism (Cullen & Gilber, 2013). A major part of this shift has been the development of various offender behaviour programmes (McGuire, 2006), in addition to other treatments that are shared between both forensic and non-forensic clients (e.g. substance misuse, mental health). Assuming that these treatments are theoretically effective, in order for these programmes to work and for offenders to benefit, it is safe to assume that clients need to at least attend these sessions and engage well (Drieschner & Verschuur, 2010). This is to allow a meaningful level of learning is achieved and hopefully allow offenders to integrate the learnt skills/knowledge into their daily lives.

However, due to a variety of reasons, offenders often fail to engage in such programmes, with treatment refusals and dropouts reaching high rates (Alemohammad, Wood, Tapp, Moore & Skelly, 2016; McMurren & Theodosi, 2007). Treatment dropouts significantly reduce the effectiveness of such treatments, with dropouts being associated with higher financial costs (Sampson, James, Huband, Geelan & McMurren, 2013), negatively impacting staff/offenders' morale (McMurren & Ward, 2010) and resulting in higher rates of recidivism (McMurren & Theodosi, 2007). Consequently, understanding and modifying offender engagement is an important step towards reducing attrition.

Problems with defining, measuring and researching engagement

Generally there has been a lot of confusion with regards to what constitutes as engagement, possibly due to a lack of a good forensically relevant theoretical framework. As a result, literature has often focused on treatment dropouts and completion as indicators of engagement, but these can often be the symptoms or outcomes of such process. It is logical to assume that the main aim of researching engagement is to measure this construct early on in order to intervene and enhance it. However, in their systematic review of standardized measures of engagement, Tetley, Jinks and Howells (2011) found that only five out of the 40 included measures of engagement met at least half of their criteria for what research has shown constitutes as engagement. They reported that many measurements included factors that are related to treatment progress or other related factors (e.g. treatment satisfaction), representing poor definition, lack of consensus and theory of engagement.

Similarly, in their review of associations of offender engagement in group programmes, Holdsworth, Bowen, Brown and Howat (2014) found high levels of variations on what each included study considered as variables that assessed treatment engagement. Indeed, these problems have led researchers and practitioners to use various terms such as "treatment readiness", "motivation", "engagement" and "responsivity" interchangeably. This has led to inconsistent application of terms and theories creating confusion in research and understanding of this construct, and consequently slowing down the development of effective

strategies to deal with non-engagement (Scott & King, 2007; Ward et al., 2004, Drieschner & Verschuur, 2010).

Intuitively, an important determinant of treatment engagement could be motivation. Although there is no consensus on what factors enhance offender motivation (McMurrin & Ward, 2004), in the treatment context it has generally been considered as whether the offender is enthusiastic towards change and whether he/she expresses a desire to want to enter treatment (Day, Casey, Ward, Howells & Vess, 2010). Offender motivation itself is considered as one of various responsivity factors that are considered to impact how effective the treatment will be delivered, and whether the offender would learn and benefit from the treatment on offer. Therefore, it highlights the importance of delivering treatments in a way that is contingent to the offenders' learning style, personality and attributes (Andrews & Bonta, 2003).

Treatment readiness is a broad term that encompasses many responsivity factors within it. It is defined as the presence of various characteristics, within the offender, setting and/or therapy, that if supported, would lead the individual to be "treatment ready" and therefore would result in good engagement in treatment (Day et al., 2010). Finally, Drieschner, Lammers & van der Staak (2004) defines engagement as the individual's level of active participation in the treatment. However, as discussed earlier, the subject of engagement has often been confused with other relevant constructs and the vast majority of current measures of engagement fail to measure this construct reliably

and comprehensively. They either rely on unstandardized measures, convenient records in isolation (e.g. attendance) or other related, but factors that are not engagement (e.g. attitude towards treatment, treatment satisfaction; Drieschner & Verschuur, 2010). Therefore, there is a gap for identifying/developing a comprehensive measure of engagement that is both relevant and applicable to forensic population.

Strategies to enhance engagement

Due to difficulties discussed in terms of conceptual understanding of engagement and measuring this construct reliably, research has also been hampered in terms of developing offender-specific strategies to enhance engagement. Arguably, currently the most popular strategy to enhance engagement in forensic settings is Motivational Interviewing (MI, Miller & Rollnick, 1991). This is an empathic type of counseling that attempts to draw out the client's intrinsic motivation by maintaining a non-confrontational approach, improving the person's self-efficacy and resolving ambivalence towards change. Since its development, many studies have attempted to assess the impact of MI with offender population. However, a systematic review conducted by McMurran (2009) reported that MI's impact was equivocal in relation to outcome measures (e.g. substance misuse & recidivism), other than enhancing treatment engagement.

Even then, the author stated that no firm conclusions could be drawn, due to not conducting a meta-analysis and including non-randomised and non-peer reviewed articles. Therefore, there is a need to

further evaluate MI's impact in relation to several outcomes, including engagement, considering that it is widely used in forensic settings, yet there is not enough robust evidence to support its effectiveness. However, even if it was found that MI is effective at enhancing engagement, using trained MI counselors on a large scale would be an unrealistic proposal for many forensic settings, given the limited resources. This is in addition to a recognition that focus on single-dimensional factors that influence engagement (e.g. offender motivation) have often come to the detriment of other important influences (e.g. staff competencies) and ignoring their interconnectedness have led to poor operationalization of such interventions, reducing their effectiveness.

Indeed, models of offender engagement, such as the integral model of Treatment Motivation and Related Concepts (Drieschner et al., 2004) and Multifactor Offender Readiness Model (Ward et al., 2004) both highlight the importance of targeting various external, treatment and patient factors as crucial for achieving good treatment engagement. Therefore, there is a need for a development of an efficient, cost-effective multimodal intervention that holistically targets such factors that influence engagement. This thesis presents an opportunity to examine through a variety of robust methods (meta-analysis, RCT and a critical analysis) the challenges of measuring and influencing engagement with a forensic population.

Targeting the gap in research

The author begins the thesis by systematically evaluating the effectiveness of MI in relation to several outcome measures, including engagement with the offender population. This chapter is a highly novel and important piece of work, as for the first time, it utilises a meta-analytic approach using only randomized controlled trials and peer-reviewed articles to draw a more definitive conclusion on the effectiveness of MI in forensic settings.

The following chapter aims to investigate how feasible it would be to intervene and enhance engagement on a larger scale in forensic environments that are highly changeable and resources are often limited. It was argued that effective interventions should simultaneously and efficiently focus on a variety of factors that have shown to be important in forensic-specific readiness/engagement models mentioned above. Therefore a novel training package targeting such factors was proposed and it was argued that an integration of several interventions would result to better outcome. A number of methods are used to measure engagement, and both qualitative and quantitative methods were utilized to explore staff members' perception of the intervention. This mixed method design would also provide further insight into reasons behind offenders' non-engagement and strategies that might overcome them.

Finally, although Tetley et al., (2011) was able to identify the Group Engagement Measure (GEM; Macgowan, 1997) as the most superior measure, the applicability and clinical utility of this assessment has not

been previously investigated. It is important for an effective measure of offender engagement to be theoretically relevant to this population, be practical and efficient in forensic environments where resources are scarce. Therefore, this thesis will also critically evaluate the reliability, validity and applicability of this measure for the forensic population.

Chapter 2

The effectiveness of motivational interviewing with offenders: A systematic review and meta-analysis of randomised controlled trials.

Abstract

Objective: The aim of this review is to conduct a novel meta-analysis of RCTs to evaluate the effectiveness of MI with offenders in relation to reducing alcohol consumption, substance misuse, recidivism and engagement.

Methods: Several databases were utilised, using different variations of terminologies such as "MI", "RCT" and "offenders". Studies with offender samples that investigated any variations of MI, compared to no intervention or treatment as usual were included. Studies that included composite treatment packages were excluded. Outcome data from several studies were synthesised for the meta-analysis, and any remaining studies were systematically reviewed. Risk of bias for each study was assessed, using the standard Cochrane Collaboration tool.

Results: Twenty RCTs were included in the analysis. The meta-analysis revealed that for alcohol consumption, MI showed poorer outcome in comparison to control (Standard Mean Difference, -13), while there was no effect of MI in reduction of substance misuse and recidivism. Insufficient data was available to conduct analysis with the engagement outcome, however the systematic review revealed MI to be effective at improving engagement.

Conclusion: Though it is widely used in forensic settings, MI's effectiveness varies according to each outcome of interest. Given the popularity of such intervention in correctional settings, both practitioners and researchers might need to exercise caution on what they are attempting to achieve using MI. Better and more consistent outcome measures should be sought for engagement.

Introduction

According to the Risk, Need and Responsivity principle (RNR), effective treatments are those that are matched according to the offender's level of risk, target the individual's criminogenic needs and are delivered in a responsive manner (Andrews, Bonta & Wormith, 2006). The responsivity principle emphasises that these interventions should be delivered in a way that are considerate towards the person's learning style, abilities, desire and values. Clients' motivation to change/engage is one responsivity factor and an important ingredient to facilitate offenders' engagement in treatment programmes designed to target those criminogenic needs, leading to a change of behaviour and reduced offending (Stewart & Milson, 1995; Ward, Day, Howells & Birgden, 2004). One strategy that has been proposed to help offenders engage and change their behaviour is Motivational Interviewing (MI).

MI has been described as a "client-centred, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (Miller & Rollnick, 2002, p. 25). MI originally developed as a result of clinical experience in the treatment of problem drinking (Miller, 1983) and it is closely aligned theoretically with the transtheoretical model of behaviour change (Stages of Change model; Prochaska & DiClemente, 1983) and Self-Determination theory (Deci & Ryan, 2000; Markland, Ryan, Tobin & Rollnick, 2005). Based on its theoretical content, MI has the power to be applied in forensic settings, contribute towards helping offenders to engage in relevant interventions, increase their

motivation to change and/or directly change their behaviour (McMurran, 2009).

There have been several reviews and meta-analyses conducted in non-forensic fields, assessing the impact of MI. For example, in a systematic review and meta-analysis of 10 randomised controlled trials (RCTs) by Li, Zhu, Tse, Tse and Wong (2015), the authors found that MI does not reduce drug use behaviours amongst adolescents, but rather only the attitude/intention towards change. The authors also reported potential publication bias in favour of smaller studies with bigger effect sizes. On the other hand, in a systematic review and meta-analysis of six RCTs evaluating the effectiveness of MI on alcohol consumption amongst adolescents in emergency care, Kohler and Hofmann (2015) reported mixed results, but overall small effect sizes in favour of MI.

In a systematic review and meta-analysis of 72 RCTs evaluating the effectiveness of MI in a variety of healthcare settings, Rubak, Sandbaek, Luitzen and Christensen (2005) found that MI reduced alcohol consumption and variety of diseases, even when the encounters were brief. However, in a systematic review and meta-analysis of 12 RCTs, VanBuskirk and Whetherell (2014) found mixed findings and reported that MI did not significantly reduce substance misuse in primary care settings. Finally, in a meta-analysis of 119 studies, Lundahi, Kunz, Brownell, Tollefson and Burke (2010) investigated the effects of MI in relation to a variety of outcomes such as substance misuse, alcohol problems and engagement in treatments. The authors reported non-significant findings

when MI was compared to “strong” comparisons (e.g. alternative interventions) and small effect sizes in favour of MI when compared to “weak” comparisons (e.g. no intervention). They also reported a number of moderating factors such as duration of MI, group versus individual and participants.

The use of MI in forensic settings over the past two decades has gained much popularity (McMurrin, 2009), especially within the probation service where its use is widespread. For example, the National Offender Management Service (NOMS) has identified MI as a crucial method for its Practice Framework for the management of offenders by probation staff in England and Wales (NOMS, 2015). In the United States, MI training model plan in the criminal justice system has been proposed to be implemented as part of Evidence-Based Practice (Alexander, VanBenschoten & Walters, 2008). The popularity of MI in forensic settings is understandable when considering its potential to motivationally engage offenders and simultaneously target a variety of risk factors (e.g. substance misuse, alcohol consumption) that are related to offending behaviour (Andrews & Bonta, 2010) in an efficient and non-confrontational manner.

However, this is not without its risk, given that MI is a *style* of **delivering** therapy that mostly lies within the responsivity principle of RNR and does not provide much guidance in terms of the risk or the need principles (Walters, Vade, Nguyen, Harris & Eells, 2010). Furthermore, the applicability of the theoretical frameworks that support MI, such as the Stages of Change Model (**Prochaska & DiClemente, 1982**), have not been

supported with the offender population (Casey, Day & Howells, 2005) and has attracted much criticism (see Mossiere & Serin, 2014 for a recent review). Similarly, more recent theories such as the Self-Determination Theory (Deci & Ryan, 2000) have not been thoroughly evaluated with offenders. Furthermore, offenders can often express negative attitude towards treatment, be resistant towards therapy/counsellors, remain defensive, hostile (Ward et al., 2004), as well as being present in environments that lack resources/support and are coercive (Utter et al. 2014).

When combining these issues with their concurrent complex treatment needs (e.g. substance misuse, personality disorder, offending behaviour, occupational/skills deficits), conceptually this may reduce the impact of MI **in forensic settings when compared to other** settings that are more supportive, less coercive and deal with clients that focus on singular, isolated issues (e.g. obesity, smoking) and are less manipulative or demotivated. It is therefore imperative to evaluate the effectiveness of MI with such forensic population, rather than just assuming that MI would work with them as well.

To date, only one published review has systematically reviewed the effectiveness of MI with offenders (McMurran, 2009). The main outcomes included recidivism, engagement and substance misuse. It was revealed that MI could be useful in helping offenders to engage in treatments, but the results were equivocal in relation to recidivism and substance misuse. However, a meta-analysis was not conducted and the review included

dissertations, non-randomised studies and non-peer reviewed articles. Therefore the author reported that no definitive conclusion about the overall effectiveness of MI with offenders could be made. It was recommended that studies with robust designs such as randomised controlled trials should be analysed. There is also a need to evaluate what type of outcome measure MI affects the most, what type of MI (e.g. group versus individual delivery) would be more effective and whether treatment fidelity/training would make a difference in the effectiveness of MI with an offender population.

This novel review aims to quantify the effectiveness of MI on a number of outcomes by including a larger number of RCTs. It also attempts to address some of the previous limitations and recommendations from the review conducted by McMurran (2009). This review addresses four primary research questions for MI treatment effectiveness (group or individual), at any dose, with follow-up periods of two weeks up to five years in a forensic population. First, does MI reduce alcohol consumption? Second, does it reduce substance misuse? Third, does it reduce recidivism, and fourth, does it improve engagement in treatment?

Method

Inclusion criteria

Following Cochrane recommendation of reviewing RCTs, only peer-reviewed and published articles were included in this review (Higgins &

Green, 2011). Participants in the studies were required to have committed a crime. The authors should have also referred to their experimental intervention as MI or one of its variation (e.g. Motivational Enhancement Therapy, Brief Motivational Interviewing) delivered face-to-face either as part of a group or individually. The control conditions were no intervention, providing information/advice, Treatment As Usual (TAU), community service, watching a video or any other similar form of intervention that has not shown to be effective at impacting the outcome of interest. All outcomes of interests were included in this review.

Exclusion criteria:

Studies that included a mix of forensic and non-forensic samples and those who committed rule violations (e.g. violating college campus alcohol policies) were excluded. In terms of the intervention, studies that included composite type of interventions where MI and another form of active treatment were combined together (e.g. treatment packages, CBT), as well as those with high levels of intensity (e.g. duration of more than 10 sessions) were excluded. In relation to control conditions, interventions that had shown to significantly impact the outcomes of interest in the literature were considered an active control and were therefore excluded. See appendix one for the full list of inclusion/exclusion criteria.

Scoping

In order to ensure conducting this review was warranted, a scoping search was carried out to check for recent systematic reviews and meta-analyses, as well as to evaluate the number of empirical papers available for the purpose of this review. Researchers consulted databases such as Google Scholar, OVID and motivationalinterviewing.org for the purpose of this search.

Search strategy

The following databases: Allied and Complementary Medicine Database (AMED), Her Majesty's Inspectorate of Constabulary (HMIC), Embase, ERIC, Medline, PsychINFO, Global Health Archive on TRIAL, Joanna Briggs Institute EBP, Cochrane Trials, ProQuest, Societal Abstract, Social Services Abstracts, Applied Social Sciences Index & Abstracts (ASSIA) and National Criminal Justice Reference Service (NCJRS) were searched from July 2016 up until end of October 2016. The search was conducted using terminologies throughout the articles that were relevant to MI ("MI", "motivational interviewing" OR "motivational enhancement therapy" OR "brief motivational interviewing"), RCTs ("RCT*" OR "randomised control* trial*" OR "trial*" OR "random*") and forensic population ("offender*" OR "forensic*" OR "criminal*", "prison*" OR "probation*" OR "justice*" OR "felon*" OR "mandate*" OR "rape*", "convict*" OR "inmate*" OR "court*" OR "delinquent*" OR "antisocial*")

OR "incarcerate*" OR "correction*"). The results of these searches were combined together using the "AND" function.

Outcome Measures

While there is no agreed minimum number of papers for a meta-analysis (Valentine, Pigott & Rothstein, 2010), only outcome variables that were investigated by at least five RCTs were considered. However, for the sensitivity analysis, we allowed for fewer studies to be included. The included outcome measures consisted of recidivism (including delinquency), alcohol consumption (e.g. quantity, frequency, blood alcohol level, negative consequences of drinking), substance misuse (including cigarettes) and engagement (e.g. person's behaviour in treatment, attendance).

Study Selection

Article titles and abstracts were screened to ensure they met the inclusion criteria. Exclusions were made in two stages depending on the clarity of the study, on title/abstract and full text, depending on necessity and reasons for exclusions were provided. The studies that remained after the initial screening process were further examined by reading their full text and a decision was made on which of these should be included. All remaining studies were further reviewed independently by another researcher (KJ) blinded to the decision of the first researcher (MA) to reduce selection bias. Studies that were disputed were given to a third

researcher (DD) to independently provide final comment on whether the study met eligibility criteria. Excluded articles are presented in appendix two and reasons are provided.

Data Extraction and Statistical Analysis

All relevant information from the trials was gathered. For several studies it was not possible to include the data in the meta-analysis as the results were either reported in percentages, odds ratios and/or had not reported their findings adequately and some information was missing. Researcher (MA) contacted the authors of these studies and requested the additional data. Some authors did not respond and therefore these studies had to be qualitatively interpreted. The trial information was put into RevMan 5.1 (<http://ims.cochrane.org/revman>). The extracted data was independently reviewed by another researcher (KJ) to ensure the gathered information was accurate. Change in mean from pre to post treatment was calculated for each eligible trial in order to calculate the Standardised Mean Difference (SMD). SMDs for trials for each outcome of interest were combined using the inverse-variance method, using random-effect models. There were not enough data for the "Engagement" variable and therefore this variable had to be qualitatively interpreted. In a case where an outcome of interest was measured by multiple measurements, the most objective measure was chosen (e.g. multiple biomarkers test over self-report measures; Allen & Litten, 2001; Allen & Litten, 2003; Beaurepaire et al., 2007). Sensitivity analysis was conducted for age and type of delivery (e.g. group versus individual) for each outcome of interest.

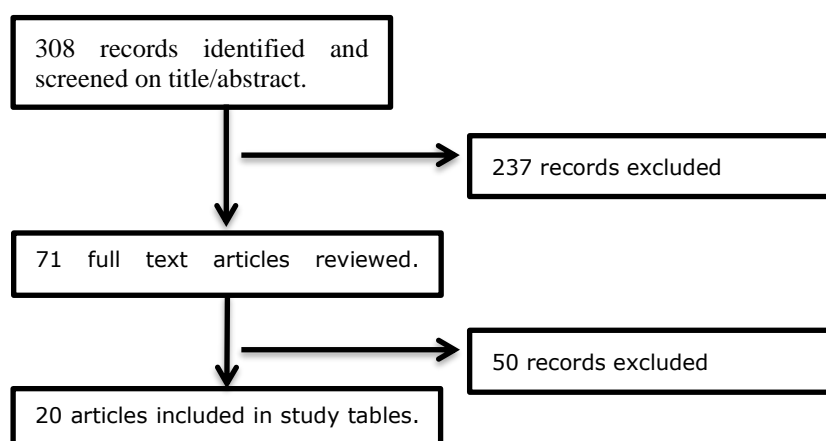
Risk of Bias

Cochrane Collaboration's tool for assessing risk of bias was utilised. Each study was rated as either high risk, low risk or unclear across seven domains on its designs. These decisions were reviewed independently by another researcher (KJ) and any disagreements were adjudicated by the third researcher (DD) to ensure a good inter-rater reliability has been achieved.

Results

Three hundred and eight articles were identified. After screening the title and the abstract of the identified articles, 71 articles remained. The full text of these articles were reviewed and 20 articles were included in the review (See figure 1 for the flow chart and table 1 for the description of studies.

Figure 1 – Flowchart showing the selection of trials



Several studies investigated multiple outcomes of interest. Twelve trials investigated the effects of MI on alcohol consumption, eleven

investigated this in relation to substance use/misuse, nine studies investigated MI's impact on recidivism and seven trials evaluated the impact of MI on engagement (see Table 1).

Table 1 – Characteristics of included RCTs.

Author (alphabetical order)	Sample & Setting	Aim	Intervention	Sample Size	Outcome Measure	Length of Follow-up	Outcome
Baird et al. (2013)	Court referred youth for high-risk driving	Reduce high-risk driving behaviour and recidivism	T: 3 x 1 hour Group MI + one hour 1:1 MI + community service C: 20 hours community service	T: 135 C: 135	Police records Risky Driving Questionnaire	6, 12 months	No difference in self-reported driving behaviours and recidivism.
Begun et al. (2013)	Incarcerated substance misusing women	Reduce alcohol/substance misuse and associated behaviour and improve treatment engagement.	T: Single 75 min individual MI feedback C: TAU; no additional resources/guidance	T: 276 C: 261	Alcohol Use Disorder Identification Test (AUDIT-12) Allen Barriers to Treatment Inventory, Texas Christian University Drug Screen	2 months	MI condition reported reduced alcohol/substance use and associated problems No difference in engagement
Brown et al. (2010)	Community Driving Whilst	Reduce risky drinking and	T: 30 min single individual Brief	T: 92 C: 92	Time Line Follow Back interview	6, 12 months	BMI resulted in less continued

	Influenced (DWI) recidivist that do not engage in treatment	increasing readiness to change, treatment utilisation and satisfaction.	MI (BMI) C: Single 30-minute individual information advice.		(TFLB) Biomarkers of alcohol Readiness To Change Questionnaire (RTCQ) Substance Abuse Treatment Utilisation/Satisfaction	s	risky driving and biomarkers of alcohol. No difference in satisfaction and RTCQ.
Clair et al. (2013) (this may not be RCT)	Incarcerated alcohol/substance misusing teens	Moderating effects of ethnicity on alcohol/substances	T: 2.5 hours two individual MI C: 2.5 hours two individual relaxation training sessions + advice giving	$n = 147$ for whole sample, not reported for each condition.	TFLB	3 months	MI group significantly reported reduced alcohol use. Ethnicity does not moderate the effect of MI on marijuana use.
Clair-Michaud et al. (2015)	Incarcerated alcohol/substance misusing	To reduce substance misuse, criminal and	T: 2.5 hours two individual MI C: 2.5 hours two	T: 99 C: 90	Delinquent Activities Scale (confirmed via Urinalysis).	3 months	Low depressed adolescents in the MI group resulted in less

	teens	delinquent behaviour	individual relaxation training sessions + advice giving		Interview		alcohol related predatory aggression. No difference for marijuana or when depressions is at mean/high levels.
Crane et al. (2013)	Perpetrators of Intimate Partner Violence (IPV) on probation	To increase treatment compliance and reduce recidivism	T: Single 50 minute individual BMI session C: Single 50-minute individual information giving about probation terms.	T: 48 C: 34	Attendance/Completion Re-arrest records	6 months	BMI associated with more treatment attendance and compliance. Greater effect when readiness was low and no difference when readiness was. No difference for recidivism.
Crane et al. (2015)	Perpetrators of IPV	To increase treatment	T: Single 50 minute individual	T: 31	Probation Records for session	6 month	MI condition attended more

	mandated to treatment on probation with drinking problems.	engagement and compliance.	BMI session C: Single 50 minute individual information giving about probation terms	C: 29	attendance.	s	sessions and at less risk of drop out for those who were binge drinkers. No difference in terms of attendance and dropouts for those without binge drinking problems.
D'Amico et al. (2013)	Court referred teens for first time alcohol/drug offence.	To reduce future alcohol/drug use, associated consequences, delinquency and recidivism.	T: Six one hour group MI sessions C: Six one-hour group Alcoholics Anonymous (AA) approach sessions.	T: 109 C: 78	Probation Records Adapted Questionnaires Motivational Interviewing Treatment Integrity (MITI)	3 months	MI group were more satisfied with sessions and rated higher on MITI. No reduction of alcohol use, marijuana use, delinquency and recidivism.
Davis et al. (2003)	Incarcerated veterans who	To reduce future	T: Single one-hour individual	T: 36	Medical records	2 months	Those in MI condition were

	met a diagnosis for Substance Use Disorder (SUD)	substance misuse and improve treatment.	BMI feedback session. C: Regular information about alcohol services and treatment enrolment.	C: 37	Addiction Severity Index, Treatment Services Review	s	more likely to make appointments for SUD treatments and attending the appointments. No difference in terms of retention in treatment or attending speciality addiction clinic.
Forsberg et al. (2011)	Incarcerated substance misusers.	To reduce illegal activity, alcohol and substance misuse.	T: Five individual MI sessions. C: Five individual sessions on post-release planning and drugs cessation.	T: 90 C: 24	Interview using Addiction Severity Index	10 months	No difference in terms of alcohol and drug use, or recidivism (illegal activities).
Helstrom et al. (2007).	Adjudicated offender teens who smoke	To reduce smoking among high-risk	T: Single individual Motivational Enhancement	T: 42 C: 27	TFLB Salivary cotinine test	1, 6 months	No overall difference between MET and control.

		adolescents.	Therapy (MET) feedback session, C: Single information giving sessions about tobacco use.				In terms of smoking, MET did better for adolescents that consumed less alcohol and were less impulsive and worse than control for those who consumed more alcohol and were more impulsive.
Nirenberg et al. (2013a)	Court referred youth for high-risk driving.	To reduce future police charges.	T: Four three-hour group MI + one one-hour individual MI + 20 hour community service. C: 20 hour community service + education/information on safe	T: 312 C: 319	Police Records Modified AUDIT Motivational Interviewing Experience, High Risk Driving Behaviour Scale	6 months	Those in MI condition are less likely to be charged with an offence and had fewer offence charges/events. However, those in MI

			driving.				reported higher alcohol use and dangerous driving.
Nirenberg et al. (2013b)	Court referred youth for high-risk driving.	To assess the effectiveness of MI on self-reported hazardous drinking.	<p>T: Four three-hour group MI + one one-hour individual MI + 20 hours community service.</p> <p>C: 20 hour community service + education/information on safe driving.</p>	<p>T: 318</p> <p>C: 160</p>	<p>Modified AUDIT</p> <p>MI Experience</p> <p>Group Climate Questionnaire</p>	6 months	<p>MI condition reported fewer decrease in alcohol after treatment.</p> <p>However, 33% of those who reported no drinking after receiving MI changed answers and acknowledged drinking, in comparison to 8% in control.</p>
Quimet et al. (2013)	DWI risky drinker recidivists in community	To reduce risky driving related incidents.	<p>T: Single 30 minutes BMI session.</p> <p>C: Single 30-minute individual information</p>	<p>T: 85</p> <p>C: 85</p>	<p>Police records</p> <p>Interview</p>	5 years	<p>No significant differences in terms of arrests and crashes.</p> <p>However, the</p>

			advice.				younger aged at risk offenders in MI condition was less likely to be arrested.
Rosengard et al. (2007)	Incarcerated alcohol and substance misusing teens.	To enhance condom use among incarcerated teens post-release.	T: 2.5 hours two individual MI C: 2.5 hours two individual relaxation training sessions + advice giving	T: 62 C: 52	Interview	3 months	In low depressed state, those in MI reported more condom use that involved marijuana. MI condition did not improve condom use that involved alcohol, regardless of depressive symptoms.
Stein et al. (2006)	Incarcerated alcohol and substance misusing teens.	To reduce risky driving and behaviour.	T: 2.5 hours two individual MI C: 2.5 hours two individual	T: 59 C: 45	Risk Behaviour Questionnaire Records	3 months	MI condition reported fewer DUI (alcohol) behaviour at low depressive

			relaxation training sessions + advice giving		Interview		states. No difference at high depressive states.
Stein et al. (2011a)	Incarcerated alcohol and substance misusing teens.	To reduce substance related problems and consequences.	T: 2.5 hours two individual MI C: 2.5 hours two individual relaxation training sessions + advice giving	T: 65 C: 31	The Risk and Consequence Questionnaire (alcohol and drugs).	3 months	MI condition reported reduced consequences/risks associated with marijuana. No significant difference for alcohol.
Stein et al. (2011b)	Incarcerated alcohol and substance misusing teens.	To reduce alcohol and marijuana use.	T: 2.5 hours two individual MI C: 2.5 hours two individual relaxation training sessions + advice giving	T: 85 C: 75	TFLB	3 months	MI condition reported fewer alcohol and marijuana use amongst those with low depressed state. MI also rated the therapeutic alliance and

							<p>warmth as higher.</p> <p>No difference for the high-depressed group.</p>
Swogger et al. (2016)	Pre-trial urban jail diversion offenders	To reduce substance misuse, engagement and investigate the moderating effects of psychopathy.	<p>T: Three/Four 40 min individual BMI sessions.</p> <p>C: Standard care of the same length.</p>	<p>T: 36</p> <p>C: 37</p>	<p>TFLB</p> <p>Toxicology screening</p> <p>Substance Use Consequences</p>	6 months	<p>MI condition resulted in fewer substance use for those with low affective traits and worsened for those with high factor 1 psychopathy traits.</p> <p>No difference in terms of treatment participation.</p>
Utter et al. (2014)	Incarcerated first time DUI offenders.	To reduce subsequent drinking behaviour and recidivism.	<p>T: Single 45 min individual BMI session.</p> <p>C: Individual</p>	<p>T: 100</p> <p>C: 99</p>	<p>Modified AUDIT</p> <p>Arrest records</p>	3 months, 2 years	No significant difference in terms of reported drinking

			assessment meeting.				behaviour, attempting to seek help and DUI related arrests
--	--	--	------------------------	--	--	--	--

Note: T: Treatment Condition, C: Control Condition.

Risk of Bias

From reviewing figures 2 and 3, it appears that the methodological quality of the included studies is unclear, especially in terms of allocation concealment, blinding procedures and “other” biases (for the overall and individual studies summaries, see Figure 2 and 3 respectively). We would also consider a high risk of bias overall in terms of attrition and reporting biases. The majority of studies reported the way they carried out random assignment; however, many did not report the allocation concealment or blinding procedures. Many trials reported high levels of attrition without carrying out Intention To Treat analysis and therefore they were rated as “high” in terms of risk of bias. Similarly, many articles did not report sufficient statistical data for the outcomes of interests or in correct formats (e.g. means or standard deviations) and therefore were also considered as “high” risk. The “Other Bias” category included whether studies declared any conflict of interest or not, or whether authors received any financial gain. For the majority of trials, this information was not available and for the overwhelming majority of included studies we could not find a registered protocol.

Figure 2 – Risk of bias' graph: review authors' judgments about each risk of bias item presented as percentages across all included studies

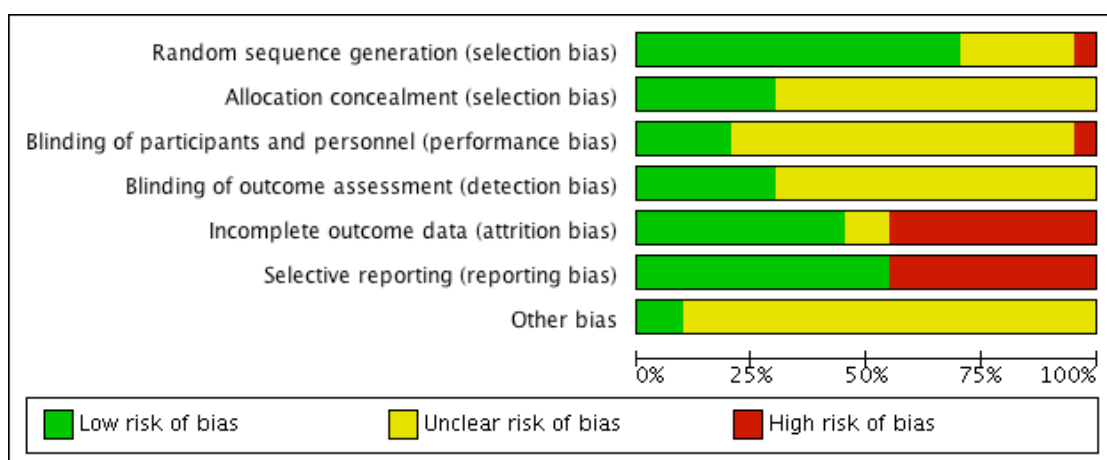


Figure 3 - Risk of bias' summary: review authors' judgments about each risk of bias item for each included study.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Baird et al., 2013	+	?	?	?	+	+	?
Begun et al., 2013	+	?	?	?	+	+	?
Brown et al., 2010	+	+	+	+	+	+	?
Clair et al., 2013	+	?	+	?	?	+	?
Clair-Michaud et al., 2015	+	?	?	?	+	+	?
Crane et al., 2013	+	?	?	?	+	+	?
Crane et al., 2015	?	?	?	?	+	+	?
D'Amico et al., (2013)	+	?	?	?	?	+	?
Davis et al., 2003	+	+	?	+	+	+	?
Forsberg et al., 2011	+	?	?	?	+	+	+
Helstrom et al., 2007	?	?	?	?	+	+	?
Nirenberg et al., 2013	?	?	?	?	+	+	?
Nirenberg et alB., 2013	?	?	?	?	+	+	?
Quimlet et al., 2013	+	+	+	+	+	+	?
Rosengard et al., 2007	+	?	?	?	+	+	?
Stein et al., 2006	?	?	?	?	+	+	?
Stein et al., 2011	+	+	+	+	+	+	+
Stein et alB., 2011	+	+	?	+	+	+	?
Swogger et al., 2016	+	?	?	?	+	+	?
Utter at al., 2014	+	+	+	+	+	+	?

Results of the systematic review

The studies that reported incomplete data and therefore could not be included in the meta-analysis were qualitatively reviewed here.

Does motivational interviewing reduce alcohol consumption?

Twelve studies investigated the impact of MI on alcohol consumption. Three of these studies are reviewed here. Begun, Rose and LeBel (2011) showed that MI reduced alcohol consumption among incarcerated women more than those who received no treatment, as assessed by the AUDIT-12 measure (Campbell, Barrett, Cisler, Solliday-McRoy, & Melchert, 2001). Furthermore, Clair et al. (2013) found that MI's effectiveness with incarcerated adolescents was specifically visible with regards to the Hispanic population in comparison to control (relaxation therapy).

However, Davis, Baer, Saxon and Kivlahan (2003) reported that incarcerated veterans that received BMI were not more likely to show different composite score on the Addiction Severity Index or their self-reported alcohol use after being released than those who only received information on alcohol services.

Does motivational interviewing reduce substance misuse?

Clair-Michaud et al. (2016) found that in comparison to control (relaxation therapy), MI did not reduce marijuana related aggression and marijuana related delinquency/stealing amongst incarcerated adolescents.

Similarly, Davis et al. (2003) found that veterans who received MI feedback were not more likely to report the importance of drug treatment as higher or use primary substances less in the past 30 days in comparison to the control (information on services/drugs). Moreover, Utter et al. (2014) reported no significant difference in terms of illegal drug use at 3 months follow up between the MI and control group (assessment meeting) amongst DUI arrestees. MI's effect on marijuana use also does not appear to be moderated by ethnicity when compared to a control (relaxation therapy; Clair et al. 2013). Finally, Swogger et al. (2016) found that substance misusing offenders in the MI condition that had high levels of core psychopathic traits did worse than control in reducing subsequent substance use, whilst conversely those in MI with low psychopathic traits fared better.

However, Begun et al. (2011) found that women who received MI related feedback in comparison to those who received no intervention reported less substance use at follow-up.

Does motivational interviewing reduce recidivism?

Crane and Eckhardt (2013) found that MI did not significantly reduce recidivism amongst IPV offenders in comparison to the control group (information giving). Similarly, Utter et al. (2014) found no significant difference in terms of number of DUI arrests, time until the first arrests and other type of offences between the MI and the control group (assessment meeting) amongst DUI arrestees.

Quimet et al. (2013) found no significant difference in terms of number of days until the first arrest between the MI and the control group. However, they reported that in the younger age category (26-43), there was a significant difference in a sense that it took DWI offenders in the MI group longer until their first offence in comparison to the control group. Similarly, Clair-Michaud et al. (2016) found that MI is better than control (relaxation therapy) at reducing predatory aggression and predatory aggression under the influence of alcohol amongst incarcerated adolescents only when depressive symptoms are low.

Does motivational interviewing increase engagement?

Seven studies evaluated the effect of MI on engagement. The variable of engagement was measured differently, however, most studies used attendance, dropouts, completions and/or making appointments as the main measurement ($n = 5$) and a few used standardised self-report measures ($n = 2$). Crane and Eckhardt (2013) found that IPV offenders that attended the MI condition were generally more likely to attend their first intake session, to attend it sooner, generally attend more sessions and also complete their treatment in comparison to the control (information giving). Furthermore, they also found that those with low readiness to change in the MI group were much more likely to attend more sessions than those with similar levels of readiness in the control condition. Similarly, Crane, Eckhardt and Schlauch (2015) found that binge drinking IPV probationers who engaged in the MI programme

attended more sessions and were less likely to drop out of the treatment, than the binge drinking offenders in the control condition (information giving).

Furthermore, D'Amico, Hunter, Miles, Ewing and Osilla (2013) found that at-risk adolescents that received the MI condition were more likely to rate the sessions as better in quality and satisfaction than the control condition (AA approach information giving). However, although the trend was in the direction of the MI, no differences were found in terms of therapeutic alliance, autonomy, group leader's style and collaboration. Davis et al. (2003) found that incarcerated veterans that received the MI feedback on their assessments were more likely to make initial appointment with the addiction clinic and to attend a Substance Use Disorder (SUD) treatment at follow up in comparison to the control condition. Similarly, in terms of rates of attendance and retention in treatment, although not significant, there was a stronger trend in favour of the MI group. Furthermore, Nirenberg, Longabaugh, Baird and Mello (2013B) found that delinquent youth who attended a group MI reported higher on engagement variables assessed via MI-Experience factors and Group Climate Questionnaire.

Utter et al. (2014) found that in comparison to control (assessment meeting), DWI offenders that attended a MI sessions were not statistically more likely to seek treatment relevant to their needs afterwards, although there was a positive trend in favour of the MI group. Begun et al. (2011)

found that incarcerated women who were randomised to the MI intervention programme were not significantly more likely to engage in any type of treatment in comparison to those that received no intervention (control), although there was a positive trend in favour of the MI group.

Results of the meta-analysis

Does MI reduce alcohol consumption?

Twelve studies investigated the impact of MI on alcohol consumption. The data from nine of these studies were included in the meta-analysis (one study included alcohol consequences; Stein et al., 2011a). The control interventions consisted of relaxation therapy ($n = 3$), advice/information giving ($n = 4$), usual court diversion programme ($n = 1$), AA approach group ($n = 1$). Five studies included self-report measures, three included interview formats (TFLB) and one included combination of various alcohol blood biomarkers. The follow-up length ranged from 3 to 6 months. There was a small but significant effect in favour of the control condition (SMD -0.13, 95% CI -0.22, -0.04; Figure 4 shows the forest plots). Heterogeneity was non-significant ($\chi^2 = 8.01$, $I^2 = 0\%$, $p = .43$).

The results of the sensitivity analysis revealed a stronger significant negative effect in favour of the control when studies with averaged younger age group ($n = 6$) were included (14 – 21 years), (SMD -0.17,

95% CI -0.27, -0.06). Heterogeneity was non-significant ($\chi^2 = 4.06$, $I^2 = 0\%$, $p = .54$). When only the studies that delivered MI individually were included ($n = 6$), there was no significant effect (SMD -0.01, 95% CI -0.17, 0.15). Heterogeneity was non-significant ($\chi^2 = 4.01$, $I^2 = 0\%$, $p = .55$).

Does motivational interviewing reduce substance misuse?

Eleven studies investigated the impact of MI on substance misuse. The data from six of these studies were included in the meta-analysis. Four studies evaluated the effects of MI on marijuana, one did not specify and the final study investigated the impact of MI on cigarettes. The control interventions consisted of relaxation therapy ($n = 3$), advice/information giving ($n = 1$), AA approach group ($n = 1$) and planning meeting for release ($n = 1$). Four trials utilised interviews (mostly TFLB) and the remaining two used self-report measure to assess this outcome. The follow-up length ranged from one to 10 months. There was no significant effect of MI on reduction of substance use (SMD 0.00, 95% CI -0.19, 0.19; Figure 4 shows forest plots). Heterogeneity was non-significant ($\chi^2 = 1.35$, $I^2 = 0\%$, $p = .93$).

The results of the sensitivity analysis revealed no significant effect when only studies with the younger age group ($n = 5$) were included (14 – 21 years), (SMD -0.01, 95% CI -0.19, 0.21). Heterogeneity was non-significant ($\chi^2 = 1.30$, $I^2 = 0\%$, $p = .86$). When only the studies that delivered MI individually were included ($n = 5$), there was no effect (SMD

0.03, 95% CI -0.19, 0.25). Heterogeneity was non-significant ($\chi^2 = 1.08$, $I^2 = 0\%$, $p = .90$).

Does motivational interviewing reduce recidivism?

Nine studies investigated the impact of MI on recidivism. The data from five of these studies were included in the meta-analysis. The offence samples included risky driving/DUI youth ($n = 3$), delinquent/at risk youth ($n = 1$) and substance misusing prisoners ($n = 1$). The control interventions consisted of information/advice giving ($n = 2$), planning meeting for release ($n = 1$), AA approach group ($n = 1$) and relaxation therapy ($n = 1$). Three trials utilised interview/self-report measures while the remaining two relied on police records. There was no significant effect on the impact of MI on recidivism (SMD 0.07, 95% CI -0.15_ 0.29; Figure 4 shows forest plots). Heterogeneity was significant ($\chi^2 = 10.18$, $I^2 = 61\%$, $p = <0.04$).

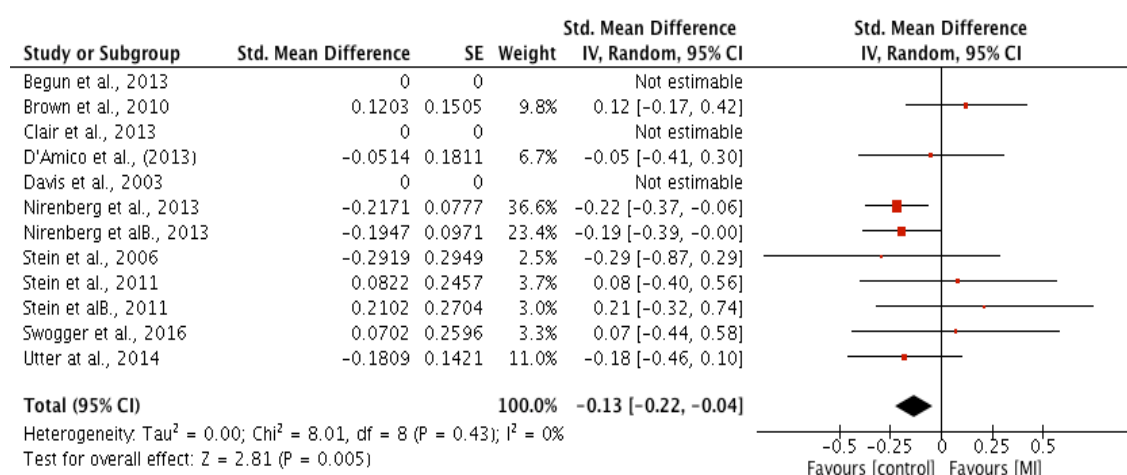
The results of the sensitivity analysis revealed no significant effect when only the younger age group studies ($n = 4$) were included (14 – 21 years), (SMD 0.09, 95% CI -0.15, 0.33). Heterogeneity was significant ($\chi^2 = 9.35$, $I^2 = 68\%$, $p = .02$). When only studies that delivered MI in a group format were included ($n = 3$), there was no effect (SMD 0.12, 95% CI -0.15, 0.39). Heterogeneity was significant ($\chi^2 = 8.22$, $I^2 = 76\%$, $p = .02$).

Does motivational interviewing increase engagement?

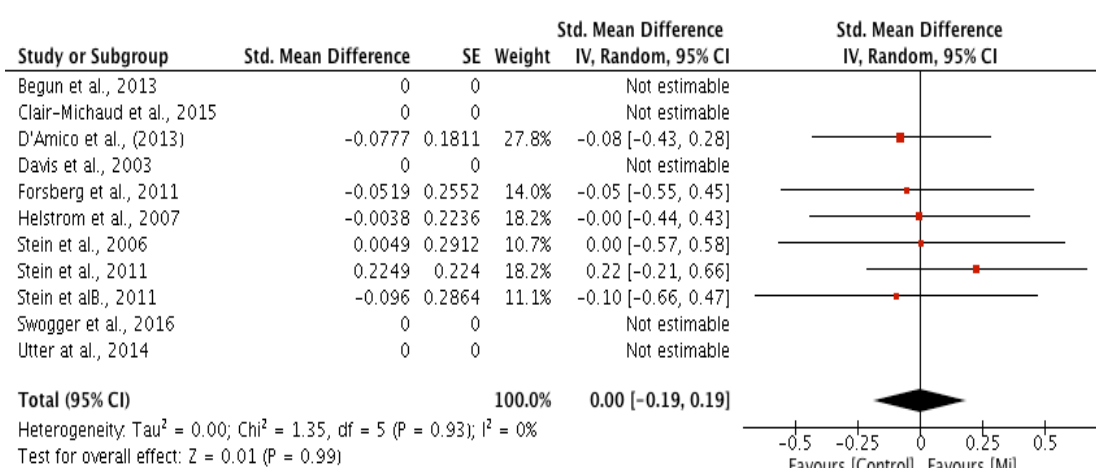
Despite contacting the authors, it was not possible to gather adequate data for at least five articles to conduct a meta-analysis for this variable. This was mainly due to articles not having assessed engagement at baseline or using standardised measures of engagement, reporting the outcome using different methods other than SMD (e.g. percentages mostly only at follow-ups) and/or not having reported the complete data.

Figure 4- Funnel plot showing the effectiveness of MI on reducing alcohol use, substance use/misuse and recidivism

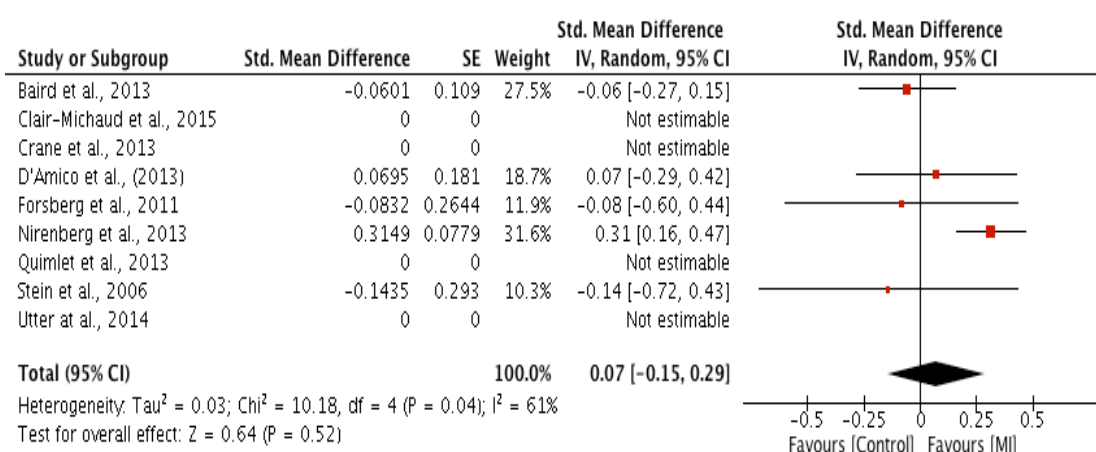
a) Alcohol



b) Substance use



c) Recidivism



Discussion

With regards to alcohol consumption and substance use, the results of the systematic review showed that the majority of RCTs reported that MI is no more effective than control. The only paper that reported positive results in favour of MI was by Begun et al. (2011), which was the only paper consisting solely of female offenders. Therefore, tentatively there

could be some evidence that MI's effectiveness on alcohol consumption and substance misuse could be moderated by gender. Furthermore, the control condition consisted of no intervention, and this supports the findings by Lundahi et al. (2010), that when MI is compared to no intervention/weak comparisons, it tends to show small positive effects. Moreover, it should be noted that the study ended up with an 80% attrition rate at follow up, making the results less reliable. The gender effect could not be investigated within the meta-analysis, as the majority of papers comprised of mostly male participants. Indeed research shows that majority of meta-analysis and reviews conducted on offenders mostly compromise of male offenders (Van Voorhis, 2012).

The outcome of the systematic review with regards to the recidivism variable was equivocal (two studies in favour of MI and two studies with no effects). It appears that MI only works in specific situations (e.g. for participants with low depressive state; Clair-Michaud et al., 2016) and this to some extent could also explain the null findings within the meta-analysis.

With regards to engagement, the results of the systematic review revealed that the majority of studies showed that MI tends to improve treatment engagement. Therefore, the results of the systematic review suggest that MI's effectiveness is mostly useful in terms of improving treatment attendance and engagement. However, it should be noted that the majority of these studies did not consider the baseline effect and only

utilised treatment attendance/dropouts/completions as their indicators of engagement. Failure to consider the baseline effect could risk overestimating the effect of intervention, as it is possible that offenders in the intervention arm were potentially more ready to engage than those in the control arm to start with. Considering that blinding procedures were not clear for many of the included trials, and many participants were promised vouchers for the completion of the studies, this increases this risk and it could mean that increased attendance by those in the MI were due to factors other than MI's effect (e.g. bias).

In relation to mode of delivery, results of the meta-analysis showed that MI, delivered individually or in a group format, does not significantly reduce substance misuse and recidivism, and it might have a small negative impact in terms of alcohol consumption. The results of the sensitivity analysis for alcohol consumption revealed that MI potentially increases alcohol consumption when it is delivered in a group format or to younger age group. The results of the sensitivity analyses were non-significant for all other factors and outcomes. Some researchers suggest that despite their cost-effectiveness, group MIs can be iatrogenic for youth (D'Amico et al., 2013; Dishion, McCord, & Poulin, 1999; Kaminer, 2005; Shapiro, Smith, Malone, & Collaro, 2010). Some argue this is often due to the bravado effect that gets created subsequent to talking about alcohol/drug use in group settings where participants could potentially glorify their use (D'Amico et al., 2013; Engle, Macgowan, Wagner & Amrhein, 2010).

The results of systematic review and meta-analysis partially support findings of previous research. For example, in terms of MI improving treatment engagement/readiness, McMurran (2009) also reported similar results in her review. Furthermore, in our meta-analysis, we found a small but negative effect size in favour of control in terms of alcohol consumption, whilst no effect size in terms of substance misuse and recidivism. McMurran (2009) reported equivocal findings in relation to these outcomes. This could partly be explained due to including non-randomised studies, qualitative interpretation and including composite interventions which could have impacted the conclusions. Despite these results, the popularity of using MI with offenders who abuse substances or have problems with alcohol is still high. For example, BMIs are promoted among probation officers in the United States as an intervention of choice to treat substance use (Swogger et al., 2016), and there have been efforts to encourage their wider practice (Walters, Clark, Gingerich, & Meltzer, 2007). It is perhaps safe to assume that clinicians have automatically applied the effectiveness of MI with substance misusers from the general population to the forensic population. However, it can be argued that this applicability is not valid due to a variety of complex issues that are unique to the forensic population.

As described in the introduction, the theoretical framework of MI is to boost person's intrinsic motivation towards change and one major way to achieve that is to help clients to provide "change talk", statements that

support the arguments for change. However, it is very common amongst forensic clients to fake readiness (Tan & Grace, 2008), lie/malinger (Porter & Woodworth, 2007; Granhag, Andersson, Stromwall, & Hartwig, 2004), and consequently comply with what the practitioner/therapist tells them. According to Self-Determination Theory (Deci & Ryan, 2000), compliance is quite the opposite of intrinsic motivation, a key aspect of MI, which arguably leads to behaviour change. Indeed one of the key principles of MI is that motivation to change is elicited from the client and not imposed upon them from outside forces. However, this is often not the case with this population, as external pressures (e.g. prison, probation officers, court etc.) and motives (e.g. earlier release, completion of license) are very common. Therefore, it is possible that MI's theoretical framework does not fully fit, both practically and conceptually, to the offender population and therefore does not draw out their intrinsic motivation to bring about the intended change, but rather resulting in compliance.

Secondly, even if clients' intrinsic motivation is drawn out, some research shows that increased motivation is not always associated with increased change in behavior (Anstiss, 2005; Woodall, Delaney, Kunitz, Westerbeg & Zhao, 2007). Indeed in a meta-analysis of 20 studies by Romano and Peters (2015) examining the mechanisms of change within MI with patients with mental health disorders, authors reported that MI did not significantly increase motivation, but it did lead to better treatment engagement (attendance, in-session engagement).

Interestingly, in a systematic review of 19 studies, Wells, Smyth and Brown (2012) reported inconclusive evidence for the relationship between attitude towards change and treatment outcomes in adapted motivational interviewing. Furthermore, It is also a common process where many prisoners express, what appears to be a genuine regret and motivation to change their offending behavior, but unfortunately many of them recidivate shortly after being released.

Therefore, there appears to be a need for presence of other factors that contribute towards behaviour change in complex cases such as forensic clients (Ward et al., 2004). For example, there is a large body of literature that shows numerous factors that are needed for desistance (Lebel, Burnett, Maruna & Bushway, 2008; Laub & Sampson, 2001; Serin & Lloyd, 2009). When considering that the majority of interventions in our review were short (average of few hours or less), with average follow-ups of 3-6 months, it is unrealistic that MI could have brought a dramatic change, and if such change persisted, it is likely to be attributable to other factors (e.g. community support, accommodation; McMurrin, 2009; Miles, Duthiel, Welsby & Haider, 2007). This is perhaps not surprising and potentially further supports the RNR model that in order for treatments to be effective for offenders, the treatment needs to adhere to all three principles of risk, need and responsivity. Having this mind, it could be argued that the majority of MI interventions in the above studies did not either match the level of risk, or completely target all of the criminogenic needs, or both, in order to bring about change (e.g. reduce recidivism).

Caution has to be applied when interpreting some of the results. For example, though care was taken to choose biomarkers or objective measures of recidivism (e.g. probation/police records) over self-report, most studies used self-reported measures, specifically with regards to alcohol use and substances. In their RCT of evaluating the effects of MI on alcohol consumption using the AUDIT questionnaire, Nirenberg, Longabaugh, Baird & Mello (2013) reported observing a treatment effect and self-report bias. Those in the MI group reported more alcohol use than those in the control. However, they found that after receiving the intervention, 33% of those in the MI group as opposed to 8% in the control changed their initial responses and subsequently acknowledged drinking. The authors argued that it is likely that those who received MI developed a better therapeutic relationship with the counselor, evident through participants' ratings. This in addition to having more opportunities to explore their drinking behavior in MI group as opposed to control possibly reduced participants' defensiveness, denial, minimisations and increased their honesty and self-disclosures.

Indeed, research suggests that use of self-reported alcohol/substance use in DWI settings maybe vulnerable to bias (Chang & Lapham, 1996; Lapham, C'de Baca, Chang, Hunt & Berger, 2002). These findings may explain why the overwhelming majority of studies exploring alcohol consumption in our analysis that relied on self-report measures found null or findings in favour of the control, whilst the study by Brown

et al. (2010) which used biomarkers of alcohol reported positive results in favour of MI.

One of the most important findings of the review was that a meta-analysis could not be conducted on the engagement outcome due to studies not capturing this variable well. As well as lack of consistent outcome measures for this variable, studies investigating engagement also had incomplete reporting and poor design (e.g. no baseline information). As we will explore through the rest of the thesis, engagement is often difficult to measure. Specifically, the majority of studies reviewed relied on unstandardised measures, attendance and or indirect observations, representing the difficulty in measuring this dynamic construct reliably.

These claims are supported by a systematic review by Tetley, Jinks, Huband and Howells (2011). The authors evaluated 40 measures of therapeutic engagement. They found that about three-quarter of such measures failed to measure engagement variable adequately, and many assessments were confusing other constructs such as motivation and readiness with engagement. Holdsworth, Bowen, Brown and Howat (2014) in their systematic review of association of offender engagement in group programmes concluded that despite the multifaceted dimensions of engagement, inconsistent definitions and assessments based on very limited aspect of this variable represent lack of theory. This then leads to confusion and poor understanding of this construct, which essentially in

our case prevented data synthesis and potentially led to measuring variables other than engagement.

However, in an attempt to take in the complexity of the measure, Tetley et al., (2011) identified the Group Engagement Measure (GEM-Macgowan, 1997) as a superior standardised measure of engagement that takes into account the multidimensionality aspect of treatment engagement. Therefore in the following chapter, we will incorporate this measure within a RCT to further evaluate its utility in a forensic setting and its sensitivity towards detecting changes in engagement.

Strengths and limitations

To conclude, this was the first meta-analysis on the effectiveness of MI using only RCTs with a forensic group, thus improving the robustness of design and reducing bias. Furthermore, the overwhelming majority of the included studies delivered MI with counselors whom received significant amount of training in MI and often their adherence to MI principles was observed and assessed. Therefore it can be argued that MI was more likely to have been delivered with its maximum potential effect. In terms of the limitations, despite contacting authors and requesting additional data, the review included relatively small number of studies in the meta-analysis. Many potential RCTs (see appendix two) that evaluated the impact of MI in forensic settings had to be excluded because of composite treatment packages (e.g. CBT delivered using MI style). This

important decision was made to ensure any positive effects were uniquely due to MI.

Similar to McMurran (2009), we also potentially missed out on identifying many studies that delivered their treatments motivationally, using MI principles, but because the authors did not explicitly refer to their treatments as MI, we could not include them, which potentially led to selection bias. It should also be noted that for many of the variables, many studies were completed by same group of authors and from a similar sample pool which might have reduced the generisability of our results. Furthermore, we could not identify the risk of bias in terms of conflict of interest or financial gains for many of these studies, which potentially might have further impacted the reliability of these results.

Conclusion

The increased popularity of MI in forensic settings is a positive move as it signals the change in mindset amongst both clinicians and researchers that a non-confrontational, empathic and strength focused form of interaction is preferred to an instructional, punishing and authoritarian style. However, it appears that MI's effectiveness is reduced when applied to offenders, potentially because theories that support its mechanisms of change are not fully validated with this population and/or are too difficult to be practically implemented in forensic settings. When MI does work, it would only show small advantage in very specific

circumstances (e.g. specific type of offenders, different age group, low depressions, individual delivery, low levels of psychopathy etc.).

Therefore, future research needs to further investigate the effectiveness of MI in relation to these moderating factors using validated assessments that measure difficult constructs reliably and bear in mind the difficulties involved in using self-report measures with the offender population. Until then, MI's impact towards increasing engagement remains promising.

Therefore, MI can be continued to be used as a strategy to enhance and maintain offenders' engagement in treatments that directly target their risks and criminogenic needs, which would lead to reduced costs and increased public safety.

Chapter 3

Does training staff in motivational techniques improve probationers' engagement in the Thinking Skills Programme?
Feasibility, acceptability and outcomes for a probation staff training intervention.

Abstract

Background: Treatment non-engagement in community forensic settings is a major problem, with high levels of attrition associated with loss of money, poor treatment effectiveness and high recidivism.

Aim: The current trial investigated the feasibility and impact of providing a brief motivational training to probation programme facilitators.

Method: A two-arm parallel cluster randomised controlled feasibility trial was conducted. One geographical probation site in London was randomly chosen using a coin toss. Facilitators within the trained site received a half-day motivational training. Facilitators at the untrained continued to deliver TSP as usual. Feasibility criteria for training included: recruitment, retention, follow-up responses and acceptability above 80%. Impact of the training was assessed via probationers' TSP session attendance, engagement ratings of probationers after each session and overall engagement using the Group Engagement Measure (GEM-27).

Results: Feasibility was generally achieved. Facilitators and probationers in the trained condition scored engagement higher on the GEM-27. Facilitators' interview responses revealed that training helped with developing early rapport and improving facilitators' skills. However, external influences were reported to be more influential on engagement.

Conclusion: Carrying out a full-scale RCT is generally feasible, though a number of recommendations are proposed to overcome organisational and setting-specific obstacles. Despite the impact of various biases, it is possible that single training session in isolation would not have a lasting significant impact on probationers' engagement.

Introduction

Treatment non-engagement: The problem

Treatment non-engagement of offenders is an endemic problem, and within community forensic settings it is not unusual for dropout rates to reach 50% (McMurrnan & Theodosi, 2007). Treatment non-completion comes **with** significant consequences **as** such higher re-offending rates (McMurrnan & Theodosi, 2007) and financial cost (Sampson, James, Huband, Geelan & McMurrnan, 2013). Non-engagement in treatment is a complex issue, and some of the reasons for higher rates of attrition within community settings can be attributed to external factors (e.g. employment, location; Ward, Day, Howells & Birgden, 2004). Nevertheless, treatment engagement could still be improved through modifying the programme and/or supporting the offenders or clinicians working with them (Ward et al., 2014).

It was identified from the previous research (McMurrnan, 2009) and chapter that strategies such as Motivational Interviewing (MI) could improve engagement among offenders, though it was acknowledged that previous work on engagement has been inconsistent and poorly conducted. A growing body of research also shows that readiness models such as Multifactor Offender Readiness Model (MORM; Ward et al., 2004) and motivational assessments such as Personal Aspirations and Concerns Inventory for Offenders (PACI-O; Campbell, Sellen & McMurrnan, 2010) are also promising methods in improving offender engagement. These

methods guide clinicians to consider the complexity of the process of readiness and engagement, supporting practitioners and organisations to focus resources appropriately to improve readiness. They also help practitioners to focus on key areas of offenders' lives that are strength-based and motivate offenders to engage in treatment and achieve their goals.

Promising motivational strategies to enhance offender engagement

Multifactor Offender Readiness Model (MORM; Ward et al. 2004):

MORM proposes that an offender's treatment readiness is a function of internal (person related) factors, as well as external (contextual) factors. Some of these internal factors consist of motivation to attain constructive goals, attitude towards treatment, self-efficacy, emotional stability, competencies and being able to work towards an offence-free identity. Some of the external factors consist of how supportive and resourceful the service/staff are towards offenders' needs, whether treatments were coerced and how available, proximate and responsive these treatments are. MORM suggests that if these factors are identified, present and supported, then the person is likely to be ready to engage well in treatment (Ward et al., 2004).

These claims are supported in recent research findings, suggesting that MORM can be used as a useful model to improve readiness and

subsequently engagement. In a recent systematic review of reasons for non-completion among offenders, Sturgess, Woodhams and Tonkin (2015) concluded that the majority of the factors reviewed were consistent with those identified within MORM (see above). Similarly, Alemohammad, Wood, Tapp, Moore and Skelly (2016) found that internal MORM factors predicted group refusals, dropouts and completion rates within a high secure forensic psychiatric hospital. Roque and Lurigio (2009) evaluated a treatment readiness group meant to target MORM related factors such as probationers' attitudinal, behavioural and motivational barriers to drug treatment programmes. They found that participation in these pretreatment interventions were positively related to treatment entry, fewer dropouts and increased completion rates of the drug treatment. Therefore, arguably increasing practitioners' awareness (through additional training) of factors that commonly result in disengagement may provide staff with an opportunity to intervene and target them to enhance readiness and reduce non-engagement.

Clarke, Jinks and McMurran (2015) recently developed a web-based training programme called the Readiness Enhancement Management Strategies (REMS) based on MORM for offenders with personality disorders. They found that fewer than half of the probation staff completed the training, mainly due to lack of time, access and technological issues. Furthermore, only less than 40% of them enjoyed the training or would recommend it to their colleagues. Consequently, while training staff to become aware of such factors may prove to be

useful in enhancing engagement, a more interactive/traditional type of training with less focus on technological requirements may be more fruitful in probation setting.

Personal Aspirations and Concerns Inventory for Offenders (PACI-O; Campbell et al., 2010): Another strategy that has shown promising results in engaging offenders in treatment is the Personal Concerns Inventory (PCI). This interview assessment is based on the Theory of Current Concerns (Klinger & Cox, 2011), and is also closely aligned with the Good Lives model (Ward & Stewart, 2003). Within this theoretical framework, goal pursuit and its associated motivation is directly related to the individual's "current concern". The PACI-O is an adapted version of PCI for the offender population. It helps offenders to identify their concerns, and rate their goals in terms of their value, attainability, control and commitment. It has been suggested that when offenders explore their own goals in relation to their concerns from the beginning, it would increase their motivation and could therefore lead to better treatment engagement. Campbell et al. (2010) reported this is achieved is through 1) facilitation of cost-benefit analysis of offending behaviour against other goals, 2) recognition of various obstacles that prevent goal attainment, 3) encouraging offenders to identify whether there is a sense of consistency across goals and 4) providing an individualised approach to assessment.

McMurrin, Theodosi, Sweeney and Sellen (2008) and Campbell et al. (2010) have both used the earlier versions of PACI-O with a prisoner

sample. Both researchers and offenders suggested that the tool could be used as a motivational enhancer. Several studies have directly measured the impact of PACI-O on offenders' engagement. Theodosi and McMurran (2006) used an older version of PACI-O with sex offenders who refused treatments. They found that those who completed the tool showed more interest, motivation and help-seeking behaviours with regards to participation in the programme, as opposed to those who received no intervention. Similarly, in a piloted randomized controlled trial (RCT) by Sellen, Gobbett and Campbell (2013), it was found that sex offender prisoners who received the PACI-O prior to attending the Enhanced Thinking Skills (ETS) programme were marginally more engaged, as assessed via the Group Engagement Measure (Macgowan, 1997, 2003, 2006) than those who did not receive PACI-O. Furthermore, in a pilot RCT of forensic outpatient unit, McMurran, Cox, Whitham and Hedges (2013) found that those who completed the PCI interview attended more individual and group sessions and were more engaged in the sessions.

In an important in-depth qualitative study of offenders within a probation setting, Palmer, Heggs and Sellen (2013) found that probationers struggled to explicitly remember the contents of the PACI-O and to report its impact on their behavior and motivation. However, the participants' accounts of their desistance process matched closely to the items of PACI-O, and the authors suggested that the motivational effects of the PACI-O had an impact at an implicit level. The authors

recommended a need for further study using this framework with a larger sample of probationers and offenders.

It should be noted that while PACI-O is a revised and briefer version of its predecessor, it still takes about 80 minutes to complete (Campbell et al., 2010). This is still a lengthy intervention that is often not realistic/practical for a probation setting on a large scale. Therefore, it is possible that training staff in the broad principles of PACI-O might still achieve some motivational and engagement benefits for probationers.

Motivational Interviewing (MI; Miller & Rollnick, 1991): A final approach previously used in the literature to motivate and engage participants is MI. As outlined in Chapters one and two, MI is a “client-centred, directive method for enhancing intrinsic motivation to change by exploring and re-solving ambivalence” (Miller & Rollnick, 2002, p. 25). MI has been closely aligned with the transtheoretical model of behaviour change (Stages of Change model; Prochaska & DiClemente, 1983) and Self-Determination Theory (Ryan & Deci, 2000; Markland, Ryan, Tobin, & Rollnick, 2005). Although it was concluded that MI could be an effective method to enhance offender engagement, due to a lack of good quality studies using standardised measures in forensic setting, its impact on engagement could not be quantified.

In a systematic review of the impact of MI in working with offenders, McMurran (2009) found that MI could lead to improved

treatment retention and an enhanced motivation to change, however, because a meta-analysis was not conducted and therefore this effect could not be quantified. Walters, Vader, Nguyen and Harris (2010) conducted an RCT to investigate the effects of MI training as a supervision strategy for probation officers on probationers' outcome. Although they did not assess offenders' engagement, they found that the MI training enhanced probation officers' empathy and adherence to the model, which could impact offenders' engagement. Similarly, Kleinpeter, Koob and Chambers (2011) found that one-day MI training improved probation officers' knowledge of MI content.

Several systematic reviews have shown that training staff in MI principles can lead to better staff competencies, even when the training's duration is only a few hours (Madson, Loignon & Lane, 2009; Soderlund, Madson, Rubak & Nilsen, 2011). However, other reviews report that it is important for staff to already have basic competencies, be ready and motivated in order to achieve changes in their practice (Barwick, Bennett, Johnson, McGowan & Moore, 2012), and engage in further coaching and supervision in order to sustain the acquired knowledge (Schwalbe, Oh & Zweben, 2014). Considering probation staff in the current study have all received basic levels of training in MI and competencies in group facilitation, it could be argued that training in MI would act as a refresher with further coaching of their pre-existing knowledge potentially impacting on their ability to engage probationers.

Rationale for the Study

The current pilot randomized-controlled feasibility trial aimed to assess the feasibility of developing and delivering a novel motivational training package (based upon three core principles outlined above) to probation staff (Thinking Skills Programme facilitators) with the aim to increase probationers' engagement in the TSP. It was summarized in Chapter 2 that forensic settings are challenging environments to conduct a RCT. As such, since this is the first study evaluating the effect of this type of intervention, the primary aim will consist of assessing a feasibility of carrying out a future larger scale RCT in this area.

As part of the primary aim, the study will be considered feasible if A) the recruitment rate is at least 80% of all the facilitators, B) the retention rate of facilitators in the trained groups is at least 80%, C) if at least 80% of all facilitators complete the follow-up interviews/questionnaire and D) 80% find the training/group useful. These rates were similar to a study evaluating the feasibility of PCI in an outpatient personality disordered clinic (McMurrin et al., 2013). A series of recommendations for future larger trials will be made.

Furthermore, the rationale behind the motivational training package is that increasing facilitators' awareness of the MORM factors, helping them structuring their sessions in a more strength-based and motivational manner using the PACI-O, and delivering them motivationally using MI

will improve probationers' engagement. Many reviews have reported poor operationalisation of assessments measuring engagement in research, often leading to confusion and poor understanding of this construct (Day, Casey, Ward, Howells & Vess, 2010; Holdsworth, Bowen, Brown & Howat, 2014; McMurran, 2009; Tetley, Jinks, Huband & Howells, 2011). It was also found in Chapter 2 that many RCTs assessing engagement relied on unstandardised methods including measures that did not adequately assess engagement, or measures that solely relied on attendance.

Therefore, the secondary aim of this study consisted of conducting a preliminary investigation of whether training facilitators in these methods may increase probationers' engagement. This study assessed engagement through a variety of different measures, including average number of sessions attended by the probationers, facilitators' ratings of engagement after each session, as well as facilitators and probationers' ratings of their engagement using a standardised measure (The Group Engagement Measure, GEM-27; Macgowan, 1997, 2003, 2006).

Method

Design

A single blind (only the probationers) two-arm parallel cluster RCT was conducted, evaluating the feasibility and impact of motivational training on probationers' engagement mandated to attend the Thinking Skills Programme (TSP).

As a feasibility study, the main concern was with recruitment and retention of staff (facilitators), their attendance to follow-up interview (after TSP, approximately 2 months) and their view of the training, which was measured both quantitatively and qualitatively. As part of the secondary outcome measures, probationers' recruitment, retention and engagement in TSP was also collected. Facilitators' feedback was gathered through a 15-minute semi-structured interview, where they debriefed about the study and were also asked questions with regards to how they perceived the training to have helped them and offenders' engagement.

Furthermore, facilitators' unstandardised ratings of probationers' engagement subsequent to each TSP session was also collected. Finally, facilitators' ratings of probationers' overall engagement after probationers completed the TSP, using a standardised measure, as well as probationers' view of their own engagement using the same measure after the completion of TSP were collected. The purpose of including different measures of engagement was to evaluate their relationship with one another and to enhance sensitivity to detect any differences by measuring different dimensions of engagement.

Ethical approval

The study was approved by the Faculty of Medicine and Health Sciences Research Ethics Committee (FMHS REC), as well as the Community Rehabilitation Company (CRC) and National Offender

Management Service (NOMS). See appendix seven and eight, respectively.

Setting & Participants

The setting for the study was the Rehabilitation and Innovative Solutions Enterprise (RISE). RISE is a private community-based organisation that offers various NOMS accredited group-work programmes such as the TSP across various geographical areas in London, UK. Although RISE delivers various types of programmes, these programmes vary in terms of their content, duration, target population and delivery style, therefore only TSP referrals were chosen for the purpose of this study, as they are the most popular groups and according to RISE, comparatively they tend to show the largest number of dropouts. TSP is a based on cognitive behaviour therapy, aimed at general offending, aiming to increase offenders' self-control, problem solving skills and help them maintain positive relationship with others (Harris & Riddy, 2008). Furthermore, given the limited resources and exploratory nature of this study, two geographical bases in North East and West London were chosen. These two sites were chosen, as they were similar in terms of the number of referrals they receive annually (approximately 100 per site) and because of their distant location from one another to reduce potential cross-contamination and tainting the randomisation process. See appendix nine for the research support letter received from RISE.

It was planned to randomly recruit 8-10 facilitators (4-5 from each site) and randomly recruit 40-50 probationers (20-25 from each base) over a period of 5 months, as this is generally considered an acceptable number for feasibility studies (Arain, Campbell, Cooper & Lancaster, 2010) and would allow a fair test of the feasibility criteria and estimation of sample size for the main RCT. From June 2016 until November 2016, potential participants were approached to take part in the study including both TSP facilitators and probationers. Facilitators were eligible to take part if they have been trained in delivering the TSP, and were currently delivering this programme within the RISE organisation. Probationers were eligible to take part if they were taking part in the TSP as part of their probation order. It was made clear to probationers that they did not have to participate in the research study in order to take part in the TSP group. Relating to offending history of this group, almost all probationers referred to this programme have committed acquisitive and/or violent offences, however those who have committed a sexual offence or domestic violence, with severe enduring mental illness and/or serious addiction problems are excluded from the TSP. The researcher could not gain access to the full offending history of each participant and did not believe this was necessary for the purpose of this research.

Interventions

Treatment As Usual: TSP Only with no facilitator training

TSP is a cognitive-behavioural intervention programme that aims to improve offenders' skills in self-control, problem solving, social perspective taking, critical reasoning and emotional management. It also helps offenders to manage their pro-criminal peers, while supporting them to reach their personal goals and values (Harris & Riddy, 2008). TSP consists of three modules: Self-Control, Problem Solving and Positive Relationships. Each module consists of five group sessions and each session can last up to 2.5 hours. At the end of each module, offenders meet one of the facilitators for an individual review session to discuss their progress and reinforce the learning objectives (Harris & Riddy, 2008). However, before beginning the group, offenders have to attend an individual induction assessment session with one of the facilitators, which last for an hour. During this session they get to discuss their goals and concerns. They then begin the group, which consists of 15 group sessions and three individual review sessions, where the group can last up to three months. Those who miss more than two sessions per module will be removed from the group and usually will be put onto the next available group.

Trained Condition: TSP plus facilitator training

The content of the training was piloted at an outpatient clinic with four assistant psychologists. The feedback was generally positive, however, suggestions were made that more time was needed to cover all of the materials adequately. As such adjustments were made to add extra time to the training date.

On the training date, facilitators in the trained (intervention) site ($n = 3$) received 5 hours of group motivational training at their own venue in West London. The training content included broad principles of offender engagement using MORM, PACI-O and MI. It should be noted that all the facilitators working for RISE have already received a five days Core Skills training that includes basic counselling skills, including MI. The main researcher, who is a graduate Doctoral Trainee Forensic Psychologist, delivered the training session. This individual has had advanced level of training in MI and has researched and used MORM, PACI-O and MI in practice.

The training began by providing psychoeducational information on MORM as the preparatory method to consider factors that could impact probationers' readiness and engagement. Subsequently, PACI-O was introduced and how elements of it, similar to the Good Lives model, could be integrated in sessions to enhance motivation. Finally, MI was introduced in order to help facilitators practice how to communicate with

the probationers in order to enhance their engagement further. Facilitators were also introduced to practical tips identified in a review by Ogrodniczuk, Joyce and Piper (2005) that have been shown to enhance treatment engagement (e.g. appointment reminders, exploring offenders' affects etc.). Throughout the training, the researcher delivered the material using a didactic style as well as group discussions and exercises, demonstrations, videos and role-plays. The aim of the training was to be flexible enough to allow the facilitators to integrate the contents into their own style as opposed to following a prescriptive nature and imposing a new structure, especially since adherence to the TSP manual is essential. See appendix 12 for a copy of the training material.

Baseline measures

Facilitators' demographic information was collected using a questionnaire, collecting information on their age, sex, ethnicity, background discipline, level of education and level of experience in years. Similarly, probationers' demographic information was gathered using the probation's data management system nDelius, including their age, ethnicity and number of convictions.

In order to ensure that facilitators were not already aware or familiar with the contents of the intervention training, a 10-item multiple choice knowledge questionnaire was developed by the researcher based on the content of the training and given to all the facilitators to complete prior to the training event. See appendix 11.

Primary Outcome measures (feasibility)

Facilitators' Evaluation of the Training

Facilitators in the trained group ($n = 3$) were given the same knowledge questionnaire four days after the training to evaluate the effectiveness of the training in terms of the change in their knowledge. A delay of four days was chosen to reduce the recency effect. They were also provided with evaluation sheets to rate the training across several domains (e.g. clarity, difficulty) and were also able to provide additional free-text feedback if they desired to do so. See appendix 13.

Structured Interview

After the completion of the groups, the researcher interviewed the facilitators in the trained group for 15-minutes, asking them to rate the training again in terms of its usefulness and applicability on a 11.5 cm Visual Analogue Scale (from extremely poor to excellent). The structured interview also consisted of a series of questions, enquiring about how the training met facilitators' professional needs, whether it was useful, whether it increased engagement, and how it could be improved in the future (See appendix 14).

Secondary Outcome measures (engagement)

Probationers' Attendance

Probationers' attendance was recorded by the facilitators and communicated to the researcher at the end of each group session. Those who missed more than two sessions in each module were removed by the facilitators from the group. A total attendance score was calculated (number of sessions attended) for each probationer in the programme.

Engagement/Understanding Ratings of Sessions

Facilitators were asked to rate each probationer's engagement in the sessions, as well as their understanding of the material on a scale of 1-5, with 1 indicating "terrible engagement/understanding" and 5 indicating "excellent engagement/understanding". The engagement and understanding scores were averaged out to produce an engagement score for each probationer in each session. Facilitators were also provided with written description of what each of these scores meant (e.g. score of 1 represent a person who does not pay any attention, is resistant/defensive, uses his phone). The facilitators emailed the ratings alongside the attendance register after each group session to the researcher via email.

Overall Engagement; Group Engagement Measure (GEM- 27, Macgowan & Newman, 2005)

At the end of the group (approximately two months), facilitators were asked to complete the short version of the Group Engagement Measure (GEM-27; Macgowan & Newman, 2005) to measure probationers'

overall engagement throughout the TSP. The GEM-27 is a 27-item measure arranged in seven dimensions: attendance, contributing, relating to worker, relating with members, contracting, working on own problems, and working on other members' problems. The rationale for choosing GEM-SV was due to a) the results of a recent systematic review, suggesting that it is currently the most useful tool for measuring treatment engagement (Tetley et al., 2011) and b) because it is designed to specifically to measure group engagement, making it more appropriate for the current study. Studies have shown that GEM-SV has excellent internal consistency ($\alpha > .9$), low Standard Error of Measurement (4.48-4.83) (Macgowan, 1997; Macgowan, 2000; Macgowan & Levenson, 2003) and good test-retest stability (.66) (Macgowan, 2000). Furthermore, GEM-SV has shown good construct and criterion validity and its use with the offender population has been supported (Macgowan & Levenson, 2003; Levenson, Macgowan, Morin, & Cotter, 2009; Chovancec, 2012). See appendix 18 for a copy of facilitator version of GEM-27.

At the end of the TSP, all probationers (completer and non-completers whom at least attended one group session) received the "member version" of the GEM-27 to complete. The member version of the GEM-27 is the same as the normal version, except with changed pronouns. Probationers also had the opportunity to provide additional feedback at the end of the questionnaire. See appendix 19 for the member version of GEM-27.

Procedure

The randomisation procedure was conducted using a simple coin toss procedure to decide which of the two sites would receive the training. This meant that each site had a 50% chance to be selected for all the facilitators working within this site to receive the training. The West London site was chosen as the active intervention site. Subsequently, the researcher approached the facilitators working in each site. They were given information sheets, consent forms and were given an opportunity to discuss the project in more detail with the researcher. After consenting to the study they were then given the demographic and knowledge questionnaires to complete. An appointment was made with facilitators in active intervention site to arrange for the training date before the commencement of the TSP groups. On the training date, facilitators ($n = 3$) arrived at their own venue in West London to receive the training. After the completion of the training, the researcher met the facilitators four days later and provided them with an evaluation form and the knowledge questionnaire to complete.

The researcher gathered future referrals for the upcoming TSPs at each probation site. Due to time limitation, two TSP groups at each site could take part in this study (four in total). The individual induction sessions of the TSP occurs across four days before the actual start date of the group. The researcher attended each of those dates to approach the probationers. In order to reduce the perceived pressure from staff onto

probationers and to maintain ethical standards, facilitators were given a brief instruction to provide to the probationers, such as asking them if they were willing to meet the researcher to discuss the research further. Those who agreed met with the researcher and were provided with an information sheet, consent form and were given an opportunity to discuss the research further. Those who refused were not contacted about the study any further. Probationers were not aware of whether their site had received the training or not. After informed consent, probationers' demographic information and number of previous offences was extracted from the probation's national management system, nDelius.

From the point of the individual induction sessions and actual group sessions, attendance register was recorded by the facilitators and emailed securely, using probationers' initials, to the researcher. Furthermore, after each session, facilitators at each site rated probationers' engagement and understanding and emailed the results to the researchers in a similar manner. After the completion of each group, the researcher met the facilitators at each site and provided them with the GEM questionnaire to rate probationers' overall engagement throughout the group, including those that dropped out. Furthermore, facilitators provided the probationers in their last sessions the member (probationer) version of the GEM-27 to complete. Those who had already dropped out were contacted through their offender managers via email.

At end of the last TSP group, the researcher approached the facilitators to conduct a 15- minute semi-structured interview, asking them to rate the impact of training across several domains and also exploring their views on the usefulness and acceptability of the training on probationers' engagement. Due to practicalities, ethical concerns and lack of resources, the interviews were not audio recorded but detailed notes were made by the researcher and attempts were made to transcribe verbatim. Figure 1 summarizes the flow of participants throughout the study.

Planned Analysis

Primary analysis was concerned with reporting recruitment, retention and follow-up-attendance rates of facilitators, as well as their overall ratings of the training. Feedback from open-ended questions during the one-to-one structured interviews with facilitators was sought. Detailed notes from the discussion were taken by the interviewer, as the interview wasn't audio recorded due to pragmatic constraints as these interviews had to be sought opportunistically. This was also because the researcher believed that audio recording could have reduced facilitators' level of disclosure and honesty, as they could have believed their responses were going to be monitored/shared. Furthermore, some researchers have argued that taking notes during the interview would allow for better analysis as it captures the researcher's thoughts and

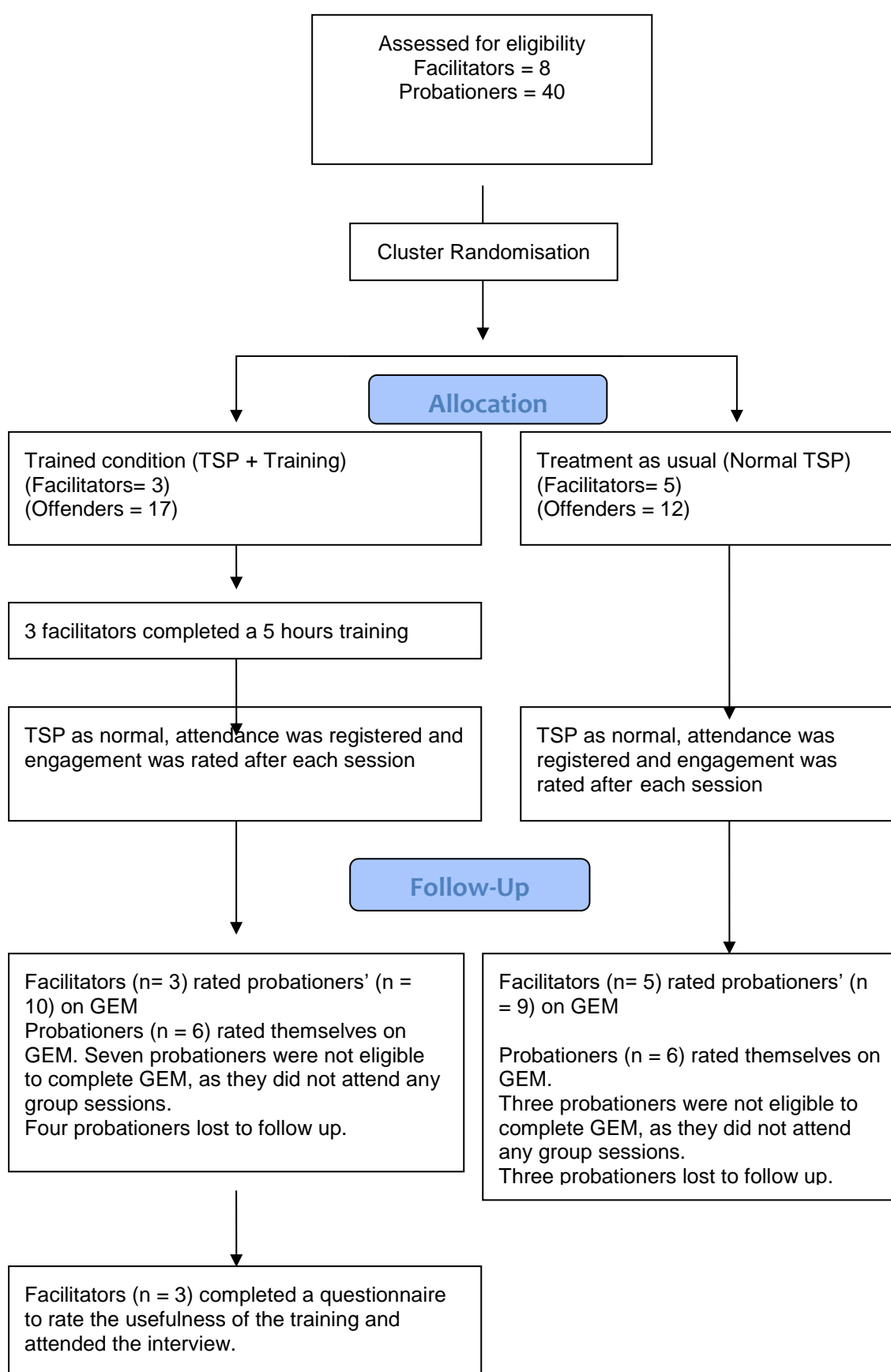
interpretations throughout the process (Halcomb & Davidson, 2006; Wangraf, 2001).

These interviews were originally planned to help engagement with the project and debrief facilitators. However, the responses to the questions provided some powerful insight into their perceptions of the training and suggested future ways to develop it. As such their responses were explored for recurring themes. Two independent reviewers checked the transcripts and came with the emerging themes and the results were cross-validated and the agreed themes by all three reviewers are presented in the result section. Themes described are tentative due to low numbers (e.g. three facilitators) and short interview schedule, but are intended to provide useful insight for future qualitative studies in this area.

For secondary analysis, probationers' engagement and understanding scores rated by the facilitators were combined and averaged out, as the authors believed the combination of these two scores would be more representative of probationers' engagement. Descriptive statistics, including average number of sessions attended, average engagement/understanding ratings and total GEM scores were calculated. Estimated effect sizes (Cohen *d*) were calculated for all measures using standardised mean differences between groups. A correlational analysis was also conducted to explore the relationship between various variables and engagement factors. For example, this was to explore if

unstandardized measures of engagement (i.e. facilitators' ratings of probationers' engagement after each session) correlated with standardised measures, or other indicators of engagement, such as attendance. Similarly, it was also of interest to evaluate whether facilitators' version of GEM correlated with probationers' version, that is to see if they could objectively **evaluating** their own participation. Finally, it was also of interest to explore whether probationers' age and/or number of convictions would have correlated with engagement. For example, it is possible to hypothesise that older members are more likely to show better self-control and to attend groups, and/or prolific probationers are more likely to complete GEM in a dishonest manner.

Figure 1. Staff training and engagement in TSP flow chart



Results

Facilitators' characteristics

Table 1 summarizes facilitators characteristics by group. Eight facilitators were approached, and they all took part in the study.

Table 1. Demographic characteristics of the facilitators.

Variable		Total (N = 8)	Trained Condition (N = 3)	TAU (N = 5)
Age (Mean, SD)		41.62 (14.86)	40.66 (11.2)	42.2 (6.28)
Consent	Consented	8 (100%)	3 (100%)	5 (100%)
	Refused	0 (0%)	0 (0%)	0 (0%)
Sex	Male	3 (37.5%)	1 (33.3%)	2 (40%)
	Female	5 (62.5%)	2 (66.6%)	3 (60%)
Ethnicity	White British	4 (50%)	1 (33.5 %)	3 (60%)
	Black British	2 (25%)	2 (66.5 %)	0 (0%)
	Black Other	2 (25%)	0 (0%)	2 (40%)
Background Discipline	Teaching	3 (37.5%)	0 (0%)	3 (100%)
	Probation	3 (37.5%)	1 (33%)	2 (66%)
	Psychology	1 (12.5%)	1 (33%)	0 (0%)
	Music	1 (12.5%)	1 (33%)	0 (0%)
Level of Education	Below Degree Level	4 (50%)	2 (66%)	2 (40%)
	Degree Level	2 (25%)	1 (33%)	1 (20%)
	Masters or Above	2 (25%)	0 (0%)	2 (40%)
Level of Experience	Less Than a Year	4 (50%)	2 (66%)	2 (40%)
	One to Three Years	0 (0%)	0 (0%)	0 (0%)
	Three Years or More	4 (50%)	1 (33%)	3 (66%)
Baseline	Mean Score out	3 (1.51)	2.66 (1.2)	3.2

Understanding of The Training Content	of 10 (SD)			(0.58)
Post-training Understanding of The Training Content	Mean Score out of 10 (SD)	N/A	6.33 (3.21)	N/A

Probationers' characteristics

Table 2 summarises probationers' characteristics. Researchers approached 40 probationers, 29 of them consented to take part in the study and 11 refused consent.

Table 2. Demographic characteristics of the probationers.

Variable		Total (N = 40)	Trained Condition (N = 20)	TAU (N = 20)
Consent	Consented	29 (72.5%)	17 (85%)	12 (60%)
	Refused	11 (27.5%)	3 (15%)	8 (40%)
Sex	Male	40 (100%)	20	20
Ethnicity	White British	10 (25%)	7 (35%)	3 (15%)
	White Other	2 (5%)	0 (0%)	2 (10%)
	Black British	4 (10%)	2 (10%)	2 (10%)
	Asian British	6 (15%)	4 (20%)	2 (10%)
	Missing	7 (17.5%)	4 (20%)	3 (15%)
	Refused	11 (27.5%)	3 (15%)	8 (40%)
Age (Mean, SD)		25.45 (5.74)	26.41 (1.62)	24.1 (1.4)
Number of convictions, including the index offence (Mean, SD)		3.17 (2.58)	2.53 (1.91)	4.08 (3.18)

Primary Outcomes: Feasibility

Facilitator Recruitment

The criterion for feasibility of a full-scale RCT was that the recruitment of the facilitators would be at least 80% of all potential facilitators approached. The actual recruitment rate for this study was 100%, as all approached facilitators were willing to take part in the study.

Facilitators' Retention

The second criterion for feasibility for conducting a larger scale RCT was that retention rate of facilitators in the trained group would be above 80%. This was also achieved as all facilitators completed the training and remained in the project.

Facilitators' Attendance at Follow-up

The third criterion was that 80% of the facilitators attended the follow up and complete the interview. All three facilitators attended the follow up sessions and completed the questionnaire and interview.

Facilitators' Acceptability

Facilitators were invited to complete the same questionnaire that they completed prior to attending the training. Results showed that facilitators' knowledge score from baseline increased from 2 to 5 for the first facilitator, 1 to 4 for the second facilitator and 5 to 10 for the third

facilitator. Because of the small sample size, statistical analysis is not warranted. Finally, in order to assess the usefulness and acceptability of the training, facilitators were asked to rate the quality of the training across several domains four days after the training was completed, as well as after they completed facilitating all of their TSP groups. These results are shown in Table 3.

Table 3. Facilitators' ratings of the training after the training/TSP were completed.

Variable	Mean	SD	Percentage
Expertise	4.67	0.57	93.4%
Clarity	4.33	0.57	86.6%
Culturally Appropriate	4.67	0.57	93.5%
Time Management	3.67	1.15	73.4%
Responsiveness	4.33	0.57	86.6%
Difficulty	3.67	1.15	73.4%
Applicability	4.33	0.57	86.6%
Meeting Professional Needs	4.33	0.57	86.6%
Involvement	5	0	100%
Future Confidence	4	1	80%
Usefulness (After the TSP)	8	0.5	69.5%
Enjoyability (After the TSP)	8.17	0.57	71%
Relevance (After the TSP)	8.67	2.02	75.5%
Total			82.77%

Note: n = 3. The "Usefulness", "Enjoyability" and "Relevance" factors were all on 11.5 scale, while the remaining factors were on 1-5 Likert scale.

Qualitative analysis of feedback

As described in the planned analysis section, facilitators were asked to provide feedback about the training with regards to several set questions during their interview. Three tentative themes emerged from the interviews: 1) Training helped with developing early rapport in individual sessions and facilitators were able to utilise the learnt skills, 2) external factors are more influential and cannot be changed and 3) change could be possible. The most important points from each facilitator are included below. See Appendix 15 for the full written verbatim notes.

Reflexivity Statement

Before examining facilitators' interview responses, it is important to acknowledge how the researcher's own perceptions and experiences influenced facilitators' responses during the interview. For example, the researcher was familiar with the facilitators and frequently observed facilitators' frustrations and complaints. This could have shaped the researcher's interpretation of some of the themes (e.g. burnout). However, this was countered by cross checking the emerging themes with independent researchers. Furthermore, facilitators were aware that the researcher had previously worked in the same role as them and throughout the course of this study, due to meeting the facilitators on several occasions; both formally and informally, the researcher was able to develop a strong rapport with the facilitators. Consequently, this could have impacted their responses in a way that they were more likely to be

open and honest about their experiences. Indeed it is possible that the same results would not have been achieved if an independent/different researchers would have met them and/or if this rapport did not exist. Consequently, future RCT needs to consider the impact of facilitators' relationship with the researcher on the nature of facilitators' qualitative feedback.

Theme 1: Training helped with developing early rapport in individual sessions and facilitators were able to utilise the learnt skills

All facilitators noted the training had some benefit and there was a consistent view that training helped with developing early therapeutic relationship with the probationers:

(The training) 'Encouraged to explore things further, what they were good at and opened a dialogue. This was especially the case at the beginning of the individual induction sessions. It also led to better rapport and resulted in them feeling more interested'. (Facilitator 1).

'It changed the way I do individual work. It helped me improve rapport at the beginning phase'. (Facilitator 2).

'It helped me focus more at the start, having more confidence and build that trust with the offenders'. (Facilitator 3).

Similarly, facilitators' account implicitly indicated that they were able to utilise the learnt skills from the training, such as MORM, PACI-O and MI:

'Now I put more emphasis on non-offence things like goals, life etc.'
and *'helping them identifying their concerns such as accommodation etc.*
and helping them with steps towards them'. (Facilitator 2).

'I would have used inquisitive questioning (e.g. why do you feel like this) to explore the reasons why'. (Facilitator 3).

Theme 2: External factors are more influential and cannot be changed.

A powerful theme that emerged inductively from the data was the importance of external factors in influencing engagement. This was important as the study related to changing engagement via staff training. All staff members interviewed placed importance on other factors in influencing engagement. These factors were deemed powerful, separate from themselves, and a sense of helplessness was reflected in some facilitator's choice of words.

'No matter how well-trained we are, we are dealing with people, they either take it on board or not, especially if there are external factors present...' and *'All of our dropouts in the current groups happened externally...'* and *'Dropouts due to external reasons can't be stopped'* (Facilitator 1).

'You're going to more or else get same/similar dynamics in such groups. I think this is because most of these are outside of your control, such as court appearances, family issues etc'. (Facilitator 3).

Theme 3: Change could be possible

Though facilitators seemed clear on what was in and out of their control, some seemed open to exploring new methods to boost engagement, even while external factors were in play.

'If they miss session, definitely give them a call, ask why they did not turn up. This might make them recognise that you care' and 'Letters to be sent out before every sessions as a reminder, as they can often change their numbers, making it difficult to contact them'. (Facilitator 3).

One facilitator acknowledged that boosting knowledge of external factors may influence their power. Such knowledge could be influenced by training.

'More training and also finding out and knowing the internal/external factors before the programme would be helpful (e.g. knowing things that might impact motivation, you can then prepare for them and target them)'. (Facilitator 2).

As such any feelings of powerlessness, or a clear sense of what can and cannot be changed for the facilitators could be malleable. This indicates a potential way 'in' to help facilitators boost engagement in future interventions.

Secondary outcomes: Treatment engagement

Also of importance was to explore the impact of training staff in engagement techniques on probationer engagement in treatment. Table 4 shows the variety of different engagement outcome measures for the control and trained conditions, as well as the overall sample.

Table 4. Engagement outcomes of the TSP group sessions for TAU and trained groups.

Variable	TAU Condition (Mean, SD)	Training Condition (Mean, SD)	Total Sample (Mean, SD)
Session Attendance *	6.25 (4.95)	5.7 (5.22)	5.93 (5.03)
Dropouts	7/12 (58%)	11/17 (64%)	18/29 (62%)
Completions	5/12 (42%)	6/17 (36%)	11/29 (38%)
Engagement /Understanding Composite **	3.78 (1.08)	3.72 (0.59)	3.74 (0.81)
Total GEM (facilitators) **	3.11 (1.13)	3.86 (0.83)	3.5 (1.03)
Total GEM (probationers)**	4.25 (0.37)	4.5 (0.44)	4.38 (0.41)

*Note: * = total number of individual and group sessions attended out of possible 13, ** = maximum score was 5*

Session Attendance, dropouts and completions

Table 4 shows that on average, probationers in the TAU condition on average attended and completed more sessions and also on average dropped out less. However, the effect size (Cohen's d) for the difference in mean number of sessions attended between the two groups was 0.1 (95%CI: -0.84, 0.64), which is considered a very small effect. Session attendance was not significantly correlated with any other outcome.

Engagement/Understanding Ratings

The scores for engagement and understanding as measured by facilitators on 1-5 Likert scales were combined and averaged, as the combination of both of these factors is more representative of the engagement variable. Table 4 shows that there were no differences between the two conditions and the effect size (Cohen's d) for the difference was 0.07 (95%CI: -0.81, 0.67), which is considered as almost no effect. The engagement/understanding ratings were highly correlated with facilitators' rating of the GEM-27 questionnaire ($r = .885, p < 0.01$).

Group Engagement Measure

Facilitators in the trained condition rated probationers' overall engagement as higher than the facilitators in the TAU condition. The effect size (Cohen's d) of this difference was 0.76 (95%CI: -0.21, 1.65), which is considered a medium effect. Furthermore, probationers in the trained condition also rated their own engagement as higher than the probationers in the TAU condition. The effect size (Cohen's d) of this

difference was 0.61 (95%CI: -0.59, 1.72), which is considered a medium effect. Interesting, no relationship between facilitators' responses on GEM-27 and probationers' responses on GEM-27 was found. Probationers' responses on GEM-27 was positively correlated with their number of convictions ($r = .562, p < 0.05$), suggesting that those with higher number of offences tended to rate themselves as more engaged on the GEM-27 questionnaire. Similarly, probationers' responses on GEM-27 was also positively correlated with their age ($r = .317, p < 0.05$), suggesting that older probationers were more likely to rate their own engagement as higher.

Furthermore, Spearman's correlational analysis was conducted to examine relationships between engagement and demographic variables in the total sample. Table 5 shows the only significant relationship was between Facilitators Ratings on GEM and their composite rating of probationers' engagement/understanding ($\rho = 0.865, p < 0.001$). A borderline relationship was observed between probationers' total GEM scores and number of convictions ($\rho = 0.562, p = 0.057$).

Table 5. Correlation matrix between engagement and probationers' demographic variables.

	1	2	3	4	5
1. Number of convictions	-	-	-	-	-
2. Age	0.309	-	-	-	-
3. Total attendance	0.036	0.039	-	-	-

4. Eng/und composite	0.029	0.025	-0.159	-	-
5. Probationers' Total GEM	0.562	0.317	-0.101	-0.151	-
6. Facilitators' Total GEM	-0.342	0.113	0.203	0.865*	-0.030

Note: 1. Total number of convictions, 2: Probationers' age, 3.: Mean number of sessions attended by probationers (out of 13), Eng/Und: Combined engagement and understanding scores of the probationers rated by the facilitators, Probationers' GEM-27: Probationers' ratings of their own overall engagement using GEM-27, Facilitators' GEM-27: Facilitators' rating of probationers's overall engagement using GEM-27

* = $p < 0.001$

Discussion

The first aim of this trial was to assess whether it is feasible to carry out a staff training intervention using an RCT design in a probation setting. The results showed that a main RCT would be generally feasible in this setting. Although the recruitment, retention and follow-up attendance rates of facilitators met the feasibility criteria (all at 100%), the results of the structured interview showed there were mixed feelings with regards to the acceptability/usefulness of the training. There were also issues with retention of participants in the TSP, with dropout rates reaching high levels. All of these points are important when considering feasibility for a larger trial. This discussion will now explore each key finding in depth.

The second aim consisted of evaluating the impact of training on probationers' engagement. It was found that the control condition marginally attended more group sessions on average, however, the effect

size for this difference was very small and **non-significant**. There appeared to be no differences in terms of facilitators' mean ratings of engagement and understanding of the probationers between the two conditions. However, facilitators and probationers' rating on the GEM was higher for the training condition, with differences in effect sizes within the medium range, although still **non-significant** due to small sample size. Finally, there was a consistent view amongst the facilitators believing that the training did not have a direct impact on probationers' engagement. These results will also be explored in more detail.

Feasibility Results

Although feasibility criteria was met for recruitment of staff (100% took part in the study), about a quarter of probationers in the TSP refused consent to take part in the research, and there was a large number of dropouts from the TSP and incomplete follow-up responses (i.e. attrition). Although these were not part of the main feasibility criteria as they were the outcome measures, they would certainly impact the feasibility of conducting a future RCT in this setting and therefore have to be considered. The high refusal rates was perhaps not surprising, given that probationers were mandated to attend the programme and during the individual TSP induction sessions, many expressed feelings of resentment, paranoia, hostility and resistance. However, refusals were significantly larger in the control condition, which might suggest that the training had some impact on developing early rapport with probationers and reducing their defensiveness. This was further confirmed by the facilitator

responses in the trained condition during the interview that the training particularly helped them develop an early rapport and therapeutic relationship with probationers.

Another consideration when planning a larger RCT in this setting were procedural issues relating to recruitment sites. Despite the initial plan to approach several sites to increase power and recruitment rates, it was found during the course of the research that it is a common procedure for facilitators from different sites to work at nearby sites to facilitate TSP temporarily. This has the potential to contaminate the randomisation procedure. Future RCTs in these settings need to bear this in mind when utilising a cluster randomization procedure, and consider using alternative strategies such as contingency management (e.g. providing vouchers) to increase recruitment rate of probationers.

Another important contextual factor for consideration in future trials was the large number of changes and organisational reformations during the course of the feasibility study. This created a barrier for recruiting both facilitators and probationers as other sites could not be approached. This has important implications for any studies considering using multi-site methodology, and future RCTs should allow more time for recruitment and data collection. Furthermore, future studies should be aware of the highly changeable environment of probation services that may not lend itself to an RCT (McMurran et al., 2013; Walter et al., 2010).

Furthermore, a large number of attrition, both during treatment and at follow-up stages were observed amongst probationers. With regards to poor follow up responses from the probationers, despite contacting their offender managers, we received very little response, which potentially impacted the validity of the study as those that dropped out did not provide their views on the GEM questionnaire. Attrition, particularly in research where engagement is the focus, is incredibly important; therefore future RCTs should potentially consider whether gathering consent from the beginning to contact the offenders directly via the phone to complete the GEM questionnaire is a more viable option.

First, in relation to acceptability of the intervention, although facilitators generally reported very positive results about different aspects of the training four days after they completed it (average above 80%), their responses became less consistently positive after the completion of TSP groups during the semi-structured interviews. Although thematic analysis wasn't originally planned for facilitator feedback, their responses during the structured interviews, as well as researcher's observation revealed potential issues relating to facilitators' feelings of powerlessness/helplessness and other potential barriers that reduced the feasibility of carrying out such interventions in the future. These are discussed in more detail below.

The aim of training in MORM was so that facilitators could consider variety of factors that could impact probationers' readiness to engage and

intervene pre-emptively. However, we found that due to the fast pace nature of probation setting, reducing pre-group meetings, lack of resources, facilitators delivering multiple groups during the week and time pressure, this was not achievable. The probation service in UK has recently gone through major reformatations and privatisations. According to a recent report by Kirton and Guillaume (2015) assessing the workforce condition in probation subsequent to these changes, they reported an increased deterioration in working conditions, which has resulted in increased workload and stress, job dissatisfaction, job insecurity and little opportunities for personal development. Considering that several reviews have shown that correctional staff already tend to experience high levels of stress and burnout (Shaufeli & Peeters, 2000; Finney, Stergiopoulos, Hensel, Bonato & Dewa, 2013), the combination of these two factors made it very difficult for facilitators to manage this kind of preparation work. Consequently, future RCTs might also want to consider measuring baseline levels of burnout of staff in these settings.

With regards to PACI-O, evident from their responses during the interview, it appeared that some facilitators felt it helped them focus more on exploring offenders' concerns and goals. However, some argued that they did not rate offenders' goals explicitly and could not use this approach consistently as the content of the training was sometimes at odds with what the TSP manual was expecting of them, which placed a great deal of emphasis on early offence work (Harris & Riddy, 2008). Similarly, with regards to MI, it appeared that some facilitators showed

signs of using aspects of MI. For example, some suggested how they were able to focus more on offender motivation, therapeutic relationship, using open questioning, focusing and directing conversations. While there is some evidence to suggest that one-two day training in MI is not the optimal way to increase competency (Simpson, Walter, Matson, Baer, & Ziedonis, 2005), our rationale was that the sum of different strategies together in our training would have been more effective than its individual parts.

Facilitators also made a few recommendations for conducting an effective future RCT. For example, in relation to time spent on training, facilitators reported that more time was necessary to deliver the training effectively. Therefore, the recommendation for future trials is for the training to be delivered twice across at least two days, with individual supervision/coaching sessions to ensure facilitators' competencies in delivering PACI-O and MI are at basic levels of proficiencies. MI proficiency can be assessed using standardised measures, such as the Motivational Interviewing Treatment Integrity coding system (MITI, Moyers, Martin, Manuel, Miller & Ernest, 2010) and other skills can be monitored via supervision and observation. An important consideration for the current study was that facilitators in the trained condition were on average less experienced than those in the control condition and therefore the content of the training were more novel to them.

It is possible that despite the current study revealing that facilitators showed increase in their knowledge after the training, as well as expressing increased confidence after the completion of group, they did not gain the minimum level of proficiency, especially since their delivery/performance was not monitored. Miller and Mount (2001) found that professionals trained in MI showed a good level of understanding of the content afterwards, however, once their practice was monitored, they did not show to have the basic levels of competencies and it appeared that their confidence outstripped their skills. Therefore, training does not necessarily always improve practitioners' competencies (McMurrin, 2009) and so future monitoring of the fidelity of treatment and adherence to the model is crucial to ensure maximum impact is achieved.

Engagement Results

In relation to the impact of staff training on probationers' engagement, the quantitative results were equivocal. Although the effect size in difference was very small, the control condition attended and completed on average more sessions. The researcher at both sites noticed that sometimes probationers were not informed in advance to attend their appointments at the right time/date or were provided with wrong information. Others were being instructed to attend the group, but the group would have clearly clashed with their work and/or was not feasible for where they lived. These observations were also supported by facilitator's responses during the interview.

It was also noticed a large number of probationers in the control site had already dropped out from TSP previously and were put forward in the current groups as part of their last chance before being breached, which potentially could have put more pressure onto them to attend. Furthermore, it was revealed that facilitators in the TAU condition were on average more experienced and qualified than those in the trained site, which could have also partially contributed towards better attendance of the probationers. Indeed research shows that MI's effectiveness is moderated by professionals' experience and credentials (Rubak, Sandback, Luitzen & Christensen, 2005; Lundahi, Kunz, Brownell, Tollefson & Burke, 2010). Finally, the researcher observed that facilitators in the control site were more likely to contact probationers in advance to remind them of their appointments. Research has shown that appointment reminders enhance treatment attendance (Ogrodniczuk, Joyce & Piper, 2005), which might also explain why probationers attended more sessions than those in the trained condition.

Our findings lead us back to the aim of the thesis, which is to understand how we can best capture engagement. Some argue that treatment attendance on its own is a poor determinant of treatment engagement (Clarke et al., 2015; Holdsworth et al., 2014) and that it is poorly correlated with engagement (Macgowan & Newman, 2005). This is especially the case in forensic settings when offenders are motivated to attend treatments due to compliance and external pressures (e.g. coercion) as opposed to genuine motivation to change. These individuals

can be minimally engaged as measured by other metrics, but yet **complete programmes**. However, it was found that even asking facilitators to rate probationer's engagement after each session on a 1-5 Likert scale would also not be informative, as no differences were reported between the two conditions. It was noticed that facilitators often tended to score probationers the same score (i.e. 3 or 4), irrespective of their performance or giving enough thought to their ratings.. It may also well be that because facilitators could not explicitly rate engagement across several dimensions using this method, this reduced the sensitivity towards detecting any significant differences in probationers' engagement.

As such, an important consideration for a larger trial would be, what outcome measure for engagement should we use? From examining the correlational analysis in this study, it is clear that for this study attendance was not related to any other engagement outcomes. This may be indicative of the lack of representativeness of this variable towards engagement. Indeed, mean attendance may not tell us how engaged the person was in key sessions and may provide little information on how to intervene to improve engagement. The 1-5 Likert rating by the facilitators were correlated with facilitators' ratings on the GEM questionnaire, showing that potentially they were targeting the same construct. However, such information still did not appear to be informative at detecting any significant differences. Therefore, utilising measures of engagement such as GEM for group settings, or other promising methods such as Treatment Engagement Rating scale (Dreschner & Boomsma,

2008) for individual work might be more beneficial as such assessments have been validated amongst offender samples. These assessments would provide information on which aspect of engagement the individual struggled with and therefore would guide practitioners to target these relevant areas.

Therefore, an important part of the study was to trial the GEM-27 as a multidimensional measure of engagement. Compared to other measures of engagement such as attendance and facilitators' subjective rating of probationers' engagement after each session, it was found that engagement as measured by GEM-27 was higher in the trained condition. This was true when rated by both offenders and facilitators. This is similar to previous feasibility study by Sellen et al. (2013) that found this tool may be more sensitive at detecting different levels of engagement, which is argued here to be possibly due to measuring engagement across several dimensions. The use of a standardised scale as oppose to simple Likert scales could reduce performance bias as facilitators might feel less pressured to provide a socially desirable answer.

The rating of probationers' engagement using GEM-27 as higher in the trained condition was an interesting finding as they were the only people in the trial to be blind to condition. As such, it may be that the training had a trickle-down effect on engagement as judged by those who the facilitators were attempting to engage. As this was a feasibility trial we cannot make too much of this finding from an intervention

perspective. However, it emphasizes the importance of using the GEM-27 for offenders in future trials, and of ensuring both offenders and clinicians to be blind to conditions.

When considering whether facilitators and the probationers taking part in the group agreed with their rating of engagement, it was found that facilitators and probationers' ratings of GEM-27 did not correlate with one another. However, research has shown that the relationship between the member and facilitator versions of GEM could be modest ($r = 0.28 - 0.47$; Macgowan, 1997; Levenson & Macgowan, 2004). Despite some research suggesting that probationers' responses on self-report measures are better predictors of probationer outcome (Skeem et al., 2007; Walter et al., 2010), it was noticed in this study that many probationers tended to complete the GEM-27 quickly or overestimated their performance (ceiling effect). This could have been partly due to perceived pressure from the facilitators (as facilitators gave them the questionnaires to complete), fear of consequences and lack of insight or honesty, which might explain this lack of relationship. Recruiting independent researchers could reduce such pressures, however, continuous re-assurance that their responses will remain confidential/anonymous could also help achieving more valid responses.

Furthermore, despite the fact that some argue social desirability is not as problematic amongst offenders (Mills, Kroner & Loza, 2003), Zemore (2012) found that social desirability was a better predictor of

treatment attendance and better treatment outcome amongst substance misusers outpatients than actual instruments meant to measure such constructs. Similarly, research has shown that in terms of treatment readiness, offenders tend to respond in a socially desirable manner (Serin & Kennedy, 1997) and offenders' responses were not correlated with staff's evaluation of offenders on the same construct. It is likely that these issues also apply to engagement, where the lack of correlation between facilitators and offenders' responses on GEM-27 could be due to offenders attempting to respond in a socially desirable manner. Therefore future RCT should consider validity/deception/socially desirability measures to counter these difficulties whilst administering the GEM-27 to probationers via independent researchers. Chapter 4 will explore the validity and reliability of the GEM-27 in these settings in more detail.

In the interview part of the study, all three facilitators argued that there was not a noticeable difference in terms of the impact of the training on probationers' engagement. However, there appeared to be a consistent view in that all facilitators felt factors that were outside of their control, including programme timing, poor support, probationers' location, family issues, court appearances and employment prevented many offenders from attending further. All expressed that no matter how well trained they are, the factors mentioned above essentially have a bigger impact on probationers' engagement and one facilitator claimed that all of their dropouts/refusals were due to external factors. In addition to these issues, it is also possible that due to mandated nature of TSP, many

probationers perceived that they were coerced into attending this programme, something that has also shown to impede treatment readiness and engagement (Day, Tucker, Howells, 2004). These findings further support the importance of addressing the external factors of MORM in community forensic settings in order to enhance offender engagement (Ward et al., 2004).

Conclusion

The purpose of this study was to investigate the feasibility of conducting a larger scale trial and also to conduct a preliminary evaluation on whether the training impacted probationers' engagement. Whilst generally feasible, a series of crucial modifications are recommended in order to ensure a more efficient evaluation would be guaranteed. Perhaps what this study highlighted was the organisational and setting-specific difficulties associated with conducting a RCT in fast-paced environments such as the probation settings. This further emphasizes the importance of organisational support and readiness for conducting such research, which might be difficult when resources are lacking and when staff are already pressured to carry out their routine work. With regards to engagement, both from observation and facilitators' feedback, it became apparent that addressing various external factors, such as offenders' location, employment or court appearances before they are referred for group work would determine how offenders would engage.

Currently research exploring the effects of such factors on engagement is in its infancy, possibly because it is much more difficult to isolate and modify such factors and evaluate their impact empirically. Such evaluations would require even closer collaborative support and communication with potentially several organisations/departments. Finally, this study supported previous findings that utilising attendance or unstandardised measurements of engagement might not be efficient ways of measuring such construct, emphasising the importance of utilising standardised measurements such as the GEM-27 in future research. The next chapter will critically explore the reliability and validity of this measure detail and for the first time will review its applicability and clinical utility for forensic settings.

Chapter 4

A critical evaluation of the psychometric properties and clinical utility of the Group Engagement Measure (GEM) in forensic settings.

Introduction

Over the past few decades, there has been a sharp increase in the development of evidence-based treatments that target a variety of risk factors and criminogenic needs of offenders (Lipsey, Landenberger & Wilson, 2007). These include a variety of accredited offending behaviour programmes developed by the National Offender Management Service (NOMS) and National Health Service (NHS) (NOMS, 2013). Assuming that such programmes are theoretically effective, it has been consistently argued, both conceptually and logically that in order for these programmes to work, offenders need to at least attend and complete such programmes, as dropouts might in fact increase recidivism (McMurran & Theodosi, 2007). However, there is a growing body of research that suggests basic attendance might not be enough to achieve meaningful change in offenders' behaviour (Day, Casey, Ward, Howells & Vess, 2010; Holdsworth, Bowen, Brown & Howat, 2014). Indeed, offenders need to engage with the material in order to learn and incorporate the acquired skills into their daily lives. Perhaps this may partially explain why some of these accredited programmes in practice achieve very modest results (e.g. Sadlier, 2010; Hollis, 2007).

As we have learnt so far in this thesis, promoting offender engagement seems like an achievable goal, however the research of our own, and of others has shown this can be a difficult task with many challenges to overcome (McMurran & Ward, 2010). First, from the

theoretical perspective, there is no consensus on what “engagement” consists of, and there is certainly a lack of forensic-specific theories on how to increase offender engagement. This has often resulted in **researchers** confusing engagement with other related terms (e.g. readiness, motivation), which has slowed down the progress of our understanding and advancement in this area. Second, many offenders can show antisocial tendencies and some are detained against their will in un-therapeutic environments, and/or are forced to attend treatments due to some external incentives/pressures and coercion. Therefore, inherently they are more likely to not want to engage in such programmes. Finally, as discussed in Chapter two, there is a problem with measuring, as there has been a lack of standardised assessments to reliably measure this construct and therefore research has reported mixed, unstandardised findings that has led to even more confusion amongst both researchers and practitioners.

Drieschner, Lammers, & van der Staak (2004) suggests that engagement is the individuals’ level of active participation in the treatment. In a recent systematic review of measures of engagement, Tetley, Jinks, Huband and Howells (2011) proposed engagement should be measured behaviourally. They suggested measures of engagement should assess different domains of participation including: 1) attendance, 2) completion of treatment, 3) homework, 4) contribution to therapy such as self-disclosure or partaking in activities, 5) appropriate working alliance with the therapists and finally 6) being supportive towards other members

in case of group programmes. However, it should be noted that this review was not specific to forensic measures or population and it is possible that indicators such as session attendance and programme completion rates are not as useful with offender population. As we argued earlier, offenders are unique as they can comply with court orders and/or probation licenses to attend sessions and remain minimally engaged to the extent where they may be able to complete the programmes, but not achieving significant change (Ward, Day, Howells & Birgden, 2004).

Nevertheless, after systematically reviewing 40 measures of engagement, Tetley et al. (2011) identified the Group Engagement Measure (GEM; Macgowan, 1997) as the most superior measure according to their criteria, being the only measure that at least measured four out of their proposed six criteria needed for a measure of engagement (except treatment completion and assessment of homework). The GEM is a leader-rated assessment to measure participants' level of engagement in groups through observation. It was created by Macgowan (1997) after developing a model of engagement based on reviewing the previous literature on engagement and its measurements in social group work. The author recognised a lack of consensus on what was considered to be engagement, as well as **how poor measures of engagement had resulted in poor understanding of group processes. Consequently, the author highlighted the importance of** being able to increase engagement early on and improve treatment effectiveness. Macgowan (1997) **also** identified the multidimensionality aspect of engagement, something that had not been

comprehensively incorporated in the few measures of engagement that existed at that time (e.g. Group Climate Measure; MacKenzie, 1981).

The author recognised seven dimensions from previous literature that were the main contributing factors to engagement. These were 1) treatment attendance, 2) contributing, such as participating verbally and engaging in activities 3) relating to worker, that is being able to be supportive towards the facilitators, 4) relating to member, such as interacting with other members and being supportive towards them, 5) contracting; including acceptance of group norms, 6) working on own problems, which may include acknowledgement of problems and self-disclosures and finally 7) working on others' problems, such as helping others achieving their goals and work collaboratively on group problems (see Appendix 18 for a copy of GEM).

Macgowan (1997) developed questions that were believed by many experts in the field to be related to each domain, leading to a development of a 48-item questionnaire. The GEM was tested with groups of mixed substance-dependent members, and social work group workers as the raters. The groups focused on a variety of topics including substance misuse, parenting and homelessness. Subsequent to further analysis, 10 items were eliminated and Macgowan (1997) reported that overall, GEM-37 was a reliable and valid measure. Macgowan (1997) argued that GEM-37 allowed for the assessment of multidimensional aspects of engagement, recognising that participants may engage in some

areas and not in others. However, the author argued that a minimal level of engagement is required in all dimensions if the participant is deemed to be engaged.

It should be noted that subsequent research has revealed two shorter variations of the GEM-37 that are also feasible, such as GEM-27 and GEM-21 (Macgowan & Newman, 2005). While GEM-27 has retained all seven dimensions and only a few items were removed from each factor, GEM-21 is based on a five-factor model, with Attendance and Contracting categories having been removed from the measure. Macgowan and Newman (2005) reported that GEM-21 produced the best fit indices for both clinical and non-clinical groups, while GEM-37 and GEM-27 produced good indices only for clinical groups. The GEM-27 was used in chapter 3, due to author's suggestion and lack of validity/reliability studies for the five-factor model. Furthermore, the member version of the assessment has also been utilised in a few studies and has shown some relationship with the facilitator version of GEM. The member version of GEM only replaces the pronouns of the items (e.g. "the member arrives at or before start time" changes to "I arrived at or before start time") and it is for group members to rate their own engagement.

The GEM and its variations have been used in a variety of settings, such as student samples (Macgowan, 2000; McHarg, Kay & Coombes, 2012), HIV preventative intervention for parents and their adolescents (Prado, Pantin, Schwartz, Lupei, & Szapocznik, 2006; Tapia, Schwartz,

Prado, Lopez, & Pantin, 2006), adolescents (Macgowan, 2011, unpublished), adult sex offenders (Levenson & Macgowan, 2004; Levenson, Macgowan, Morin, & Cotter, 2009; Levenson, Prescott & D'Amora, 2010; Sellen, Gobbett & Campbell, 2013) and domestically abusive men (Levin, 2006; Chovanec, 2012, 2014). For the purpose of this review, the psychometric properties of these assessments, their generalisability, practicalities and their applicability to forensic settings will be examined.

Psychometric properties of the measure

Various articles that had utilised GEM as part of their measurement to assess engagement were gathered. The inclusion criteria included any study that had at least reported one aspect of either reliability or validity outlined below. The exclusion criteria included studies that were qualitative in nature and non-empirical review papers. Table 1 summarises the results.

Table 1. List of studies evaluating GEM's psychometric properties

Study	Sample	Reliability				Validity		
		inter-rater reliability	Internal consistency	Standard error of measurement	Test-retest stability	Construct validity	Concurrent validity	Predictive validity
Macgowan (1997)	Raters: Graduate Students Members: Substance dependency	r: 0.28	0.97	4.52	—	GAS: 0.52 IOPR: 0.22 RS: -0.2*	Subjective rating of overall progress: 0.84	0.42 on 8 th session
Macgowan** (2000)	Raters: Students Members: Students wanting to reduce stress	-	0.97	4.77	0.66	GAS: 0.40 IOPR: 0.25 RS: 0.38	Subjective rating of overall progress: 0.87	ICS: 0.27 Workers' Rating: 0.32
Macgowan & Levenson (2003)	Raters: Therapists Members: Sex offenders	-	0.97	4.48	-	GAS: 0.30 SOTRS: 0.72 FoSOD: -0.50	-	-
Levenson &	Raters:	r: 0.47	0.95***	5.25***	-	IOPR:	-	-

Macgowan (2004)	Therapists Members: Sex offenders					0.30*** SOTRS: 0.72, 0.34*** FoSOD: -0.50, -0.32***		
Levin (2006)	Raters: Students Members: DV offenders and parenting groups	-	0.83	-	-	-	-	-
Prado et al., (2006)	Raters: Facilitators Members: adolescents	-	0.85	-	-	-	-	Attendance: b: 0.21 – 0.28. (see text)
Levenson et al., (2009)	Raters: Therapists Members: Sex offenders	-	0.93	-	-	-	-	OSR: 0.35 TSR: 0.42
Levenson et al., (2010)	Raters: Therapists Members: Sex offenders	-	0.89	-	-	-	-	OSR: 54
Macgowan (2011)	Raters: An independent	-	0.95**	5.14	0.68	-	-	-

	rater							
	Members: Adolescents							
McHarg et al., (2012)	Raters: Facilitators	-	-	-	-	-	-	Average of 4 learning assessments : 0.30
	Members: Students							
Chovanec (2012)	Raters: Facilitators	-	0.91****	-	-	-	-	-
	Members: DV offenders							
Average Total	-	0.37.5	0.92	4.83	0.67	0.3	0.86	0.2 – 0.5

*Note: - = information is missing. * = Non-significant. ** = Figures are averaged out between time 1 and 2. *** = Client version of GEM. **** = Gem-27. All values (without *) are significant at $p < 0.05$.*

GAS: Group Attitude Scale, RS: Resistance Scale, IOPR: Index of Peer Relations, ICS: Index of Clinical Stress, SOTRS: Sex Offender Treatment Rating Scale, FoSOD: Factors of Sexual Offender Denial. OSR: Overall Satisfaction Rating. TSR: Treatment Satisfaction Rating

Reliability

Examining Table 1, it appears that GEM-37 has been utilised in a variety of settings and with different populations. In terms of its reliability, leader version of GEM-37 has consistently shown excellent internal consistency and very low standard error of measurement, and that includes for both the GEM-27 and the member version of GEM. The author could not find any reports for GEM-21. This shows that the overwhelming majority of items measure the same constructs, or at least different aspect of the same construct (i.e. engagement). However, some argue that very high alphas (0.95 or higher) are not necessarily desirable, as it may suggests that some items are redundant (Streiner, 2003). When considering the utility of such assessments in clinical settings, with clients for whom cognitive exhaustion might be a problem (For example, mental health problems, or learning difficulties), the goal is to create a measure with different items that measure similar, yet unique aspects of the construct. This needs to be investigated in future research and potentially GEM-21/GEM-27 could be better alternatives.

In relation to test-retest reliability, the measure just falls short of 0.7, which is considered as "good" ($r = 0.67$) (Hunsley & Marsh, 2008). The measure requires further independent investigation with regards to this aspect of its reliability, given also that the two studies that have provided results for this are provided by the author only, one of which is an unpublished study and the other includes only a student sample as

both the facilitators and raters, making it less generalisable. However, unlike IQ, engagement is a dynamic and variable construct and therefore it is more prone to fluctuate when it is administered at different stages, especially when some form of treatment is administered, which potentially makes the figure of 0.67 as more acceptable.

There was a moderate correlation between the member version of GEM and the leader's version of GEM (r : 0.28 – 0.47). In the previous chapter, we found no correlation between facilitators' and probationers' responses on the GEM. Levenson and Macgowan (2004) found sex offenders rated their own engagement as higher on the GEM than therapists. This is line with findings in the previous chapter, where probationers also rated their own engagement as higher. While it was argued that offenders could respond in a socially desirable/deceitful manner, Levenson & Macgowan (2004) argued that it is also possible that therapists treating sex offenders underestimate clients' engagement. While it is possible that both of these factors contribute towards why offenders rate their own engagement as higher, it is also possible that setting (e.g. probation versus outpatient setting) and offence type (e.g. substance misusing antisocial offenders versus sex offenders) moderate this relationship. Therefore more research is required to investigate these moderating effects and their impacts on offenders' self-reports in order to ensure the member version of the GEM is as reliable as the leader's version.

Surprisingly, no report was found on the inter-rater reliability of GEM between different leaders/facilitators. Considering that we argued earlier that there is no consensus on what **constitutes** as engagement, this may reflect its effect in practice, where each clinician's understanding of the construct of engagement, as well as rating participants' engagement in the group could be different. There is a potential this may seriously violate the reliability of the measure, as due to lack of resources, rapid changes and high pressures in forensic environments, it is not uncommon in forensic groups where one of the facilitators becomes ill or changes to another regularly. Indeed in the previous chapter, it was noticed that these incidents are relatively common, which could have impacted the validity of GEM. Consequently, this may lead to different scoring on the assessments by different leaders. Furthermore, future research may want to explore the value of utilising independent raters as opposed to facilitators themselves. Such a study would investigate whether this would yield different inter-rater reliability results. Indeed, as it was discussed in the previous chapter, facilitators tend to form a relationship with clients, and/or be prone to a variety of biases that may impact their perception of the true level of engagement amongst group members (e.g. Beech & Fordham, 1997, Walters, Vader, Nguyen, Harris & Eells, 2010).

Validity

The GEM-37 generally seems to be a valid measure. Firstly, the measure appears to have a good face validity, as items within each sub factors are theoretically related to engagement and the measure has been

supported by reviews outlining criteria that are evidently related to the construct of engagement (Tetley et al., 2011; Holdsworth et al., 2014). With regards to construct validity, the measure did not correlate with the unstandardised scale measuring resistance (r : -0.02). However, there was a weak positive correlation between the measure and the Index of Peer Relations (Hudson, Nurius, Daley, & Newsome, 1990; IOPR; r : 0.22, 0.3), a moderate positive correlation with the Group Attitude Scale (Evans & Jarvis, 1986; GAS; r : 0.3, 0.4) and the modified reversed resistance scale (r : 0.38). Finally, there was a strong positive correlation between the measure and the GAS (only one study; r : 0.52), Factors of Sexual Offenders Denial (Schneider & Wright, 2001; FoSOD; r : 0.5) and Sex Offender Treatment Rating Scale (Anderson, Gibeau & D'Amora, 1995; SOTRS; r : 0.72) (Hunsley & Marsh, 2008). Although there is considerable variation, this generally shows an acceptable level of construct validity. Some of the fluctuations could be due to reliability of other scales, as Macgowan (1997) argued that the resistance scale did not correlate with GEM due to it being self-made and not having good validity, or items within IPR being loosely related to engagement.

Although GEM-37 has been correlated with measures that assess different but related constructs, it has not been correlated with other validated and promising measures of engagement, such as the Treatment Engagement Rating scale (TER; Drieschner & Boomsma, 2008) or Group Climate Scale (GCS; MacKenzie, 1981). This could have been due to the earlier era when the measure was originally developed, where many

validated measures were lacking. Nevertheless, Macgowan (2000) acknowledged that lack of comprehensive theory of engagement at the time and poor literature were some of the contributing factors. Furthermore, it should be noted that correlations with measures such as FoSOD might not necessarily be informative, as it is possible that engagement decreases denial or that lack of denial increases engagement (Levenson & Macgowan, 2004). Similarly, Sellen et al., (2013) found that sexual offenders who denied their offence scored higher on the GEM-27. Therefore, it is difficult to argue that FoSOD could be used to provide support for the construct validity of GEM. Finally, it should be noted that the correlation for the member version of GEM with SOTRS (r : 0.32) and FoSOD (r : 0.34) were within the moderate range (Hunsley & Marsh, 2008), which was significantly lower than the leaders' version, which makes us question the validity of this scale.

Concurrent validity of GEM was evaluated in two studies by asking facilitators to rate overall progress of the group members (Macgowan, 1997, 2000). While correlations were very high (r : 0.84, 0.87), ratings were completed by facilitators themselves, and therefore may not provide an objective measure of participants' progress. Similarly, McHarg et al., (2012) reported only a 19% difference between those who were highly engaged and showed good outcome, and those that were not engaged and showed poorer outcome. It is rather surprising that validated measures of progress, readiness to change and/or treatment completion rates were not used for the purpose of establishing concurrent validity.

Future research should potentially focus on the combination of such variables.

Finally, with regards to the predictive validity, it appears that overall GEM weakly to moderately predicted outcome, except for Levenson et al., (2010) who found a large correlation (r : 0.52) with regards to treatment satisfaction. The studied outcome measures included attendance, reduced stress, learning, treatment satisfaction and overall satisfaction. Some of these weak/moderate predictions could be in part due to the choice of outcome used, as engagement might not necessarily have much of an impact on such outcome (e.g. stress). It is also possible that some of the sub-factors of GEM-37 are not as strong determinants as others. For example, Macgowan (2000) found that interpersonal subcategories were better predictors of success. Similarly, Prado et al. (2006) reported that "Attendance", "Contracting" and "Relating to Worker" did not predict treatment attendance. Furthermore, Macgowan and Newman (2005) found that "Attendance" and "Contracting" marginally contributed to the engagement model and in general correlated poorly with the other factors. This could overall reduce the predictive strength of the assessment.

Macgowan and Newman (2005) have argued that it is possible for two different engagement models to be present (one for students and one for clinical groups), in which "Contracting" and "Attendance" may have been more important. However, there is also a possibility of a presence of

a third model for offenders, in which “Attendance” and “Contracting” would also not be a good determinant of engagement but other factors might be more relevant (e.g. assessment of homework; Holdsworth et al., 2014). Interestingly, the “Contracting” factor is an additional factor that is not part of Tetley’s et al., (2011) criteria of engagement, suggesting that this construct might not be a good determinant of engagement and/or not theoretically related to engagement. Nevertheless, Macgowan and Newman (2005) concluded that the five-factor model (i.e. GEM-21) has shown more robust psychometric properties for both the student and clinical groups. However, the predictive validity of GEM-21 has not been as thoroughly investigated as its predecessor and therefore this needs to be investigated further. We learned and confirmed previous research (Sellen et al., 2013) from the previous chapter that GEM-27 appeared to be more sensitive than more traditional predictors of engagement (e.g. attendance, unstandardised ratings) in probation settings. This potentially shows that GEM-27 is a comprehensive assessment that measures different aspects of engagement, but that it could be improved by replacing some of its sub-factors.

Applicability to forensic settings

GEM is one of the few engagement measures that are designed for group settings, and while this reduces the generalisability and applicability of this measure to individual sessions, arguably it is much easier for practitioners to assess clients’ engagement in individual sessions than

group settings, where paying attention to each member, especially in large groups **would be** a difficult task. Furthermore, as it was argued in the introduction, over the past few decades, there has been a surge in the development of various evidence-based psychological group programmes for offenders. These group programmes are often much more cost-effective in environments where resources are already tight and not necessarily spent on rehabilitation (as opposed to punishment/management). Therefore group engagement measures such as GEM might in fact be more advantageous in such environments.

Furthermore, it has been suggested that processes involved in engaging those mandated to attend groups are different to those attending out of their own volition (Levin, 2006). Although GEM was not initially developed for the forensic population, in the original study by Magowan (1997), about 58% of group members reported that they were required to attend the groups, and further studies have validated the measure with sex offenders and DV offenders mandated to attend the groups. The presence of external pressure such as this closely resembles the relevant contextual dynamics (e.g. compliance, coercion) for many offenders where they are mandated to attend such programmes. Therefore, this tends to increase the ecological validity of GEM and making it more relevant for forensic population.

However, it is important to note that GEM has not been used with mentally disordered, personality disordered offenders and those with

learning difficulties within either inpatient or prison settings. Therefore further research is needed to explore whether the model of engagement behind GEM is applicable to such **populations/settings**. Nevertheless, some argue that core engagement factors are generalisable across groups/populations (Tetley et al., 2011; Dreischner et al., 2004). As it was argued earlier, Levin (2006) suggests that it is common for many individuals mandated to attend programmes to show anger and hostility towards the group. Consequently, the "Contracting" category within the tool, which assesses member's continual disapproval towards different aspect of the group might be a redundant item. Similarly, as discussed before, attendance might also not capture forensic clients' engagement well as many could be minimally engaged. Consequently, factors such as "Attendance" and "Contracting" might not be so relevant for this population, making GEM-21 potentially a more appropriate and efficient measure.

Therefore, other promising determinants of engagement considered as important by Tetley et al., (2011) and Holdsworth et al., (2014) **are potentially better suited to be included within GEM**. One may include assessment of homework, which might be a better replacement, as many groups aim to enhance offenders' skills, such as self-control, abstinence from drugs and problem-solving skills (Lipsey et al., 2007) and these are better assessed in the natural environment of the offender. Therefore, potentially for the forensic population, "Contracting" and "Attendance" should be replaced with sub-factors assessing the homework and maybe

completion of treatment within the expected time as outlined by Tetley and colleagues.

Clinical Utility

One of GEM's limitations like similar instruments is its reliance on the leaders/facilitators to rate clients' engagement, which could potentially lead to biased ratings. Even in research settings, this would be a difficult problem to overcome, as it is costly and time consuming to bring independent researchers to rate the sessions. Furthermore, most often independent researchers have to rely on video/audio tapes to rate members' engagement. However, arguably this could also be prone to bias as not being present in the session with group members prevents the detection of many group processes, participants' affects as well as dynamics that would otherwise go unnoticed when watching/listening to video/audio tapes. On the other hand, the presence of external researchers in a group setting may also impact participants' engagement in an artificial way, as it might lead to members behaving in a socially desirable way, or shy away from disclosing vital information about themselves. Some ways to overcome this would be to introduce validity scales, or conduct more research on the member version of GEM and ensure a higher correlation is achieved between the two instruments to ensure the ratings of engagement are more objective.

GEM is based on five point Likert scale, which is an ordinal scale, although it is formatted in a way to be treated as interval. Like many ordinal scales, the problem is that we cannot tell for certain that **for example**, a distance between the score of three to four is the same as two to three. Furthermore, the score of one is described as "rarely or none of the time", two as "a little of the time", while the score of three is described as "some of the time". The conceptual difference between "rare", "little" and "some" is not very clear and therefore this may reduce the sensitivity of the measure. It might be that a four-point Likert scale is a more appropriate one, as at least one of the descriptions **appears** to be redundant. Therefore, a modification to "none of the time", "sometime", "good part of time", "all the time" might be **a better alternative**.

Furthermore, looking at some of the items, it appears that some statements use words that might be too complex for some participants to understand (e.g. partializes), especially for the member version of GEM such as offenders. Similarly, some sentences are too long (e.g. item 13 is **about 35 words in length**) that by the end of reading the statement, the person might have forgotten what the statement was about and can therefore lead to mental exhaustion or frustration. Additionally, a lot of items seem extremely subjective, even after the provided examples to enhance clarification. While again this might reflect the poor theoretical background and understanding of engagement, this could be improved through further clarification. For example, item 2 specifies that "...or leaves only for important reasons". However, it is not clear what could be

considered as “important reasons”. Similarly, all the items within the “Contracting” sub-section state that the group member “expresses continual disapproval about...”. However, this type of wording suggests the facilitator should rate the person as “all the time”, and is therefore misleading. There are many ambiguities and confusing items such as these that require further modifications and future research could quantify these statements better, using the relevant literature.

Furthermore, currently there are no normative **group data** available for GEM, making the interpretation and comparison of scores a difficult and a subjective task. If the aim of the measure is to use the scores to intervene early and enhance engagement, the scores on their own might not be very informative, as technically even though there were variations in members’ scores on GEM, they could all be within the “low” or “high” normative range, requiring further intervention to enhance engagement or no intervention at all, respectively. There are also no clinical cut off points available for which score is considered as minimally engaged, engaged, or well engaged. Therefore, it is impossible for the facilitators or researchers to know when to stop in terms of who they would consider requires further attention or not.

Conclusion

Overall it appears that GEM is a theoretically driven measure of engagement that shows relatively acceptable reliability and validity,

however, certain areas such as test-retest and inter-rater reliabilities, as well as concurrent and predictive validities require further support. It was found that for assessing the predictive validity of GEM, measures such as treatment satisfaction, learning, or clinical stress were often utilised. Whilst these could be distal factors that could be impacted by higher/lower levels of engagement, more proximal factors that have not been researched thus far could be more meaningful (e.g. readiness to change, treatment completion, recidivism).

With regards to applicability to offenders, shorter versions of GEM appear to be more appropriate for forensic settings, however, some sub-factors such as "Attendance" and "Contracting" might not be as informative as other possible factors such as assessment of homework, which means the theoretical framework of GEM can still be improved upon. This means that the GEM-21 would be a promising measure, however, this measure needs further validation. In terms of clinical utility, many items require simplifying and clarification to prevent confusion and bias and improve efficiency. Targeting these limitations, in addition to further independent evaluation of GEM would result in a multidimensional assessment that is informative, easy to use and would hopefully aid clinicians to intervene early and enhance offender engagement.

Chapter 5 - Discussion

This thesis aimed to review the effectiveness of existing strategies to enhance offender engagement and enhancing this variable by using novel strategies, assessed by a critically evaluated and a reliable measure of engagement. The results revealed several challenges and learning points for conducting research in such settings and each of these will be explored in depth.

First, when examining literature on treatment engagement in forensic populations, we found this is progressing, with researchers now starting to critically examine the term 'engagement'. Previously, due to a lack of proper theoretical models, many available variables were conveniently "put in the pot" and their relationships with engagement were assessed. This, however, has resulted in confusing results due to the presence of a variety of proxy factors which mediated/moderated the effects (Ward et al., 2004). Perhaps one of the earliest attempts to theoretically identify variables that influence engagement was by Macgowan (1997), which led to the development of GEM. Furthermore, more recently the development and application of various forensic-specific treatment readiness models on engagement (for a review see Mossiere & Serin, 2014) provided researchers with a conceptual framework to follow. The argument is that there are many variables that might make the individual not to engage in treatment, but only a few are required to be targeted/supported to make the person engage (Day et al., 2010). Now

that such guidance is available, this thesis proposes the next step is to be able to measure these determinants of engagement based on the available theory and to be able to routinely use such instruments to inform clinicians of the clients' level of engagement.

This thesis overall has highlighted the importance of using validated and reliable instruments to measure engagement. However, the results revealed that researchers have not yet understood the importance of using standardised measures and still mostly rely on treatment attendance or completion or use other related factors (e.g. treatment satisfaction) to **measure/infer** a person's engagement. However, as it was shown in chapter three, it is important for clinicians and researchers to recognise that attendance or dropouts on their own may not represent the engagement variable as they may provide different results according to treatment modalities, durations, **and** contents and therefore would not be informative.

The question of reliability **and/or** validity of measures was especially evident in chapter two, where factors such as "making appointments", "seeking help" and "satisfaction" were all considered to represent treatment engagement. Such inconsistency of an approach led to the researcher being unable to enter these outcome measures into **the** meta-analysis. This perhaps illustrates poor understanding of the available theory by some researchers. However, consequence of such confusions has also reflected itself in the **poor** development of standardised

measurements of engagement, where even some of the most highly regarded measures of engagement (e.g. GEM) are not yet theoretically and/or practically optimal. Unfortunately this has led to some form of a vicious cycle, where inefficient measures might not be informative and provide clinical impact. Consequently, researchers and practitioners will not utilise them, and these measures will not develop further and unstandardised measures will continue to be used.

These findings were further observed in chapter four. Subsequent to the development of GEM and being considered as a robust measurement of engagement, only a few studies have utilised it in engagement research. Certainly shorter versions of GEM (i.e. GEM-21) appear to have the power and utility to be implemented in forensic practice on a larger scale. It was revealed that they could inform practice and research on the development of strategies that directly target non-engagement issues across different treatments, populations and settings.

Despite the finding that MI is effective in relation to enhancing engagement, chapter two showed clearly that the confidence of applying this method in forensic practice should not be high. Firstly, outcome measures were not quantifiable and could not be entered into meta-analysis, and there were many methodological issues with the studies. It is interesting that the use of MI in practice is widespread, even for outcomes that MI was shown to not to be effective. Therefore, these findings guide us back to the drawing board to further investigate the

theoretical/practical application of MI to forensic setting. Furthermore, this suggests that in forensic settings, research does not always inform practice and much of the time various interventions that have shown to be effective for other populations and/or in different settings automatically get applied to forensic settings. However, even if we ignore the controversies involved in the effectiveness of MI, in forensic practice, unlike in research settings, it is highly unlikely for practitioners' to have undergone 50-60 hours of training and for many to have MSc or PhD qualifications in relevant fields such as counseling or psychology. Research has shown that competency and professional credentials moderate the effects of MI (Rubak et al., 2005; Lundahi et al., 2010).

Furthermore, it is likely that there is no linear relationship between MI effectiveness and competency of practitioners; rather practitioners need to at least have basic competencies/proficiencies in order to be able to achieve any effect (if not iatrogenic effect). However, this is often hard to achieve in forensic settings, where resources are often scarce and much of the funding goes towards management/punishment of offenders. This was potentially the case in chapter three, where facilitators did not show evidence of basic MI proficiency, both inferred from the pre-training knowledge questionnaire and during the interview. Training in MI to bring practitioners at a level at what researchers consider as "competent" is likely to require weeks of training, continuous supervision, workshops and assessments, which is highly unrealistic in forensic settings. This is why it was originally argued that perhaps it is time to look for unconventional

methods to enhance engagement and/or address organisational/funding issues as a first step. This finding was further reinforced by facilitators' accounts in chapter three and their suggestions for targeting various external/organisational factors that could improve engagement.

Organisational issues became apparent when conducting research in a forensic setting in chapter three. Such issues were not only limited to the lack of funding, but also due to differential role and structural systems. For example, some of the main purposes of the National Offender Management System (NOMS) include punishment, management and rehabilitation of offenders, which at times might contradict one another. Whereas in healthcare settings, there is often one main aim of supporting recovery, and therefore resources are often concentrated and focused for this very purpose. The way this translates itself on a lower level to staff's role is significant, as within NOMS, many staff are forced to accept different roles (e.g. probation officer simultaneously managing, rehabilitating and punishing the offender), leading to extreme workload, role-confusion/contradictory aims and little time for supervision/training as staff already struggle to keep up with daily tasks. Indeed role-ambiguity and unclear sense of purpose have both been associated with burnout and stress in correctional settings (Dowden & Tellier, 2004). Although staff did not explicitly state that they were **burnt-out** in chapter three, informal conversations as well as inductive interpretation of their accounts during the interviews indicated potential themes of

powerlessness, helplessness, hopelessness and perceived lack of support, which are arguably some of the facets of burnout.

Burnt out staff might not have the energy or drive to engage in extra effort or creativity that might be required to enhance offender engagement (e.g. reminding offenders of their appointments, use their MI skills, provide snacks). In these situations, and what was found in chapter 3, was that training is not always the solution to enhance engagement, as a large variance for not implementing strategies to enhance engagement could have been moderated by burnout. In fact, it is possible that training could have a negative impact on staff. This is because burnt-out individuals are likely to internally withdraw and show little commitment to their work/organisation (Dowden & Tellier, 2004), which in itself has been associated with poor performance and personal development (Culliver et al., 1991). Consequently, the message that “invitation to further training” conveys is that staff are fully/partly responsible for offenders’ non-engagement, that more work needs to be done on their part, potentially creating additional stress, negative attitudes, burnout and workload, leading to a vicious cycle. Indeed staff’s attitude and perception towards training has shown to be an important factor for predicting job stress, job satisfaction and work performance (Lambert et al., 2009). This thesis highlighted that future work in this area needs to focus on staff feedback using detailed qualitative methods, and more attention needs to be given to the relationship between **staff burnout and offender** engagement.

However, it appears that the culture and therapeutic environment of the organisation is also important in terms of how offenders would engage. For example, during the course of this research, it was often observed offenders arriving at a hot room with no air-conditioning, no water available/offered and/or having been told inconsistent group dates/times by secretaries/offender managers that clashed with their work pattern. Ironically, this can further reinforce offenders' negative attitudes towards treatment, staff and system, which have been suggested to reduce engagement (Ward et al., 2004). Such hostility is likely to get displaced onto treatment staff as they are the first point of contact. This is also likely to increase the stress of already burnt-out correctional staff, leading to **yet another** vicious cycle.

In addition, findings from Chapter 3 raised an important point, which was who should take **the** primary responsibility for offender engagement in treatment? It could be argued that if staff were able to engage an offender via an intervention, this strategy has only dealt with the symptom of the problem and not the source, and such problems are likely to persist over time. Burrows and Need (2009) in their Barriers to Change Model have compared the process of engagement and readiness to a flow of a river and various barriers/dams along the way, many of which we have already discussed above. They argued that if one dam is closed (e.g. un-therapeutic/unsupportive atmosphere), irrespective of how "open" other dams are (e.g. competent facilitators), the river/water (e.g. treatment engagement) will not flow through and it is likely that change

will not occur successfully. In order to truly rectify this problem, we would need to seriously consider systemic factors and consider a major holistic reformation of the justice system and its approaches, recognising the importance of the influence of various internal and external factors, acknowledging their interconnectedness and assessing and targeting them simultaneously (Ward et al., 2004).

It is safe to conclude that research up until this point has focused too much on interventions, staff and/or offenders and too little on the organisational and contextual factors (Day et al., 2010). Some research has already highlighted the importance of the impact of external factors on engagement in high secure forensic services (Sheldon et al., 2010) and outpatient forensic PD services (Tetley et al., 2012). However, we are not aware of any research that has evaluated a strategy to deal with such issues holistically by considering their interconnectedness. Until then, It might be fruitful to utilise innovative solutions other than training or purely focusing on staff, and perhaps placing more focus on smaller organisational factors (e.g. improving case selection, improving the referral procedures, sending reminder text messages, establishing therapeutic environments; Ogrodniczuk et al., 2005).

Conclusion

Over the past few decades, there has been a great progress in moving away from just researching the influence of single factor

components on engagement (e.g. motivation), to recognising that many other factors impact this process (e.g. responsivity factors), to start asking what set of factors are required **collectively** and needed to be supported to enhance engagement (e.g. treatment readiness; Day et al., 2010). It is possible that specifically for the forensic population, development of a theory of engagement that focuses on this construct in isolation might not capture the overall picture. This might explain why over the past few decades, researchers have failed to reach a consensus on an effective theoretical model of engagement. It may also explain why there have been a lot of focus on considering the person's treatment readiness (Ward et al., 2004).

Perhaps engagement should always be conceptualized, assessed and modified as nested within the overarching theory of treatment readiness. This could improve the efficiency of standardised measures of engagement, as they follow strong theoretical models and will be improved contingent to when the models/theories improve, closing the gap between research and practice. This will lead to consistent researching (as opposed to convenient use of available variables) of the most identified and influential factors that impact engagement and treatment readiness, taking into account their interconnectedness.

Consequently, the author has proposed a preliminary nested model of engagement (see Appendix 23). Currently, even the most promising models of treatment readiness and engagement (e.g. MORM) have not

explicitly outlined how the factors within their models interact with one another.

Furthermore, it is important for both clinicians and researchers to prefer long-term “interventions” to overcome systemic/organisational influences, especially in community settings, and make sure offenders’ do not continuously feel disappointed, develop negative attitude towards the system and for facilitators to remain healthy (not burnt out) and competent. It is imperative to recognize that short-term solutions might only provide an illusion of rectifying the problem. However, when one member of staff does not receive training/supervision, it does not just affect that individual, but as argued earlier would impact the whole system. We should not let the whole criminal justice system to fail offenders/staff and expect one clinician/researcher to save them.

References

- Alemohammad, M., Wood, J. L., Tapp, J., Moore, E., & Skelly, A. (2016). Support for the predictive validity of the multifactor offender readiness model (MORM): forensic patients' readiness and engagement with therapeutic groups. *Criminal Behaviour and Mental Health*.
- Alexander, M., VanBenschoten, S. W., & Walters, S. T. (2008). Motivational interviewing training in criminal justice: Development of a model plan. *Fed. Probation*, 72, 61.
- Allen, J. P. and Litten, R. Z. (2001) The role of laboratory tests in alcoholism treatment. *Journal of Substance Abuse Treatment* 20, 81-85.
- Allen, J. P., & Litten, R. Z. (2003). Recommendations on use of biomarkers in alcoholism treatment trials. *Alcoholism: Clinical and Experimental Research*, 27(10), 1667-1670.
- Anderson, R. D., Gibeau, D., & D'Amora, D. A. (1995). The Sex Offender Treatment Rating Scale: Initial reliability data. *Sexual Abuse: Journal of Research & Treatment*, 7(3), 221-227.

Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct*.
Routledge.

Andrews, D. A., Bonta, J., & Wormith, J. S. (2006). The recent past and
near future of risk and/or need assessment. *Crime & Delinquency*,
52(1), 7-27.

Andrews, D. A., Bonta, J., & Wormith, J. S. (2006). The recent past and
near future of risk and/or need assessment. *Crime and
Delinquency*, 52, 7-27.

Anstiss, B. (2005). An assessment of motivation and application of a
motivational interviewing programme in a New Zealand offender
sample. Unpublished PhD thesis, Victoria University of Wellington,
New Zealand.

Araon, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What
is a pilot or feasibility study? A review of current practice and
editorial policy. *BMC medical research methodology*, 10(1), 67.

Baird, J., Nirenberg, T. D., Longabaugh, R., & Mello, M. J. (2013). The
effect of group-adapted motivational interviewing on traffic
convictions and driving behaviors of court-adjudicated youth. *Traffic
Injury Prevention*, 14(6), 572-7.

- Baker, A., Lee, N. K., Claire, M., Lewin, T. J., Grant, T., Pohlman, S., ... Carr, V. J. (2005). Brief cognitive behavioural interventions for regular amphetamine users: A step in the right direction. *Addiction*.
- Ball, S. A., Martino, S., Nich, C., Frankforter, T. L., Van Horn, D., Crits-Christoph, P., Carroll, K. M. (2007). Site matters: multisite randomized trial of motivational enhancement therapy in community drug abuse clinics. *Journal of Consulting and Clinical Psychology, 75*(4), 556–67. Doi: 10.1037/0022-006X.75.4.556
- Barwick, M. A., Bennett, L. M., Johnson, S. N., McGowan, J., & Moore, J. E. (2012). Training health and mental health professionals in motivational interviewing: A systematic review. *Children and Youth Services Review, 34*(9), 1786-1795.
- Battjes, R. J., Gordon, M. S., O'Grady, K. E., Kinlock, T. W., Katz, E. C., & Sears, E. A. (2004). Evaluation of a group-based substance abuse treatment program for adolescents. *Journal of Substance Abuse Treatment, 27*(2), 123–134.
- Beaurepaire, R., Lukasiewicz, M., Beauverie, P., Castéra, S., Dagorne, O., Espaze, R., ... & Matheron, I. (2007). Comparison of self-reports and biological measures for alcohol, tobacco, and illicit drugs consumption in psychiatric inpatients. *European Psychiatry, 22*(8), 540-548.

- Beech, A., & Fordham, A. S. (1997). Therapeutic climate of sexual offender treatment programs. *Sexual Abuse: A Journal of Research and Treatment*, 9(3), 219-237.
- Begun, A. L., Rose, S. J., & Lebel, T. P. (2011). Intervening with women in jail around alcohol and substance abuse during preparation for community reentry. *Alcoholism Treatment Quarterly*, 29(4), 453–478. Doi: 10.1080/07347324.2011.608333
- Brown, T. G., Dongier, M., Ouimet, M. C., Tremblay, J., Chanut, F., Legault, L., & Kin, N. M. K. N. Y. (2010). Brief motivational interviewing for DWI recidivists who abuse alcohol and are not participating in DWI intervention: A randomized controlled trial. *Alcoholism: Clinical and Experimental Research*.
- Bryan, A. D., Schmiede, S. J., & Broaddus, M. R. (2009). HIV risk reduction among detained adolescents: A randomized, controlled trial.
- Campbell, J., Sellen, J. L., & McMurrin, M. (2010). Personal aspirations and concerns inventory for offenders: developments in the measurement of offenders' motivation. *Criminal Behaviour and Mental Health*, 20, 144–157. doi: [10.1002/cbm.761](https://doi.org/10.1002/cbm.761)
- Campbell, T. C., Barrett, D., Cisler, R. A., Solliday-McRoy, C., & Melchert, T. P. (2001). Reliability estimates of the alcohol use disorders

identification test revised to include other drugs (AUDIT-12). *Alcoholism: Clinical and Experimental Research*, 25 (242), 46A.

Casey, S., Day, A., & Howells, K. (2005). The application of the transtheoretical model to offender populations: Some critical issues. *Legal and Criminological Psychology*, 10(2), 157-171.

Chang I, Lapham SC (1996) Validity of self-reported criminal offences and traffic violations in screening of driving-while-intoxicated offenders. *Alcohol* 31:583–590.

Chovanec, M. G. (2012). Examining engagement of men in a domestic abuse program from three perspectives: An exploratory multimethod study. *Social Work with Groups*, 35(4), 362-378.

Chovanec, M. G. (2012). Examining engagement of men in a domestic abuse program from three perspectives: An exploratory multimethod study. *Social Work with Groups*, 35(4), 362-378.

Chovanec, M. G. (2014). The power of learning and men's stories in engaging abusive men in the change process: Qualitative study across programs. *Social Work with Groups*, 37(4), 331-347.

Cimini, M. D., Martens, M. P., Larimer, M. E., Kilmer, J. R., Neighbors, C., & Monserrat, J. M. (2009). Assessing the effectiveness of peer-

facilitated interventions addressing high-risk drinking among judicially mandated college students. *Journal of Studies on Alcohol and Drugs. Supplement*, (16), 57–66. Doi: 10.15288/jsads.2009.s16.57

Clair-Michaud, M., Martin, R. A., Stein, L. A. R., Bassett, S., Lebeau, R., & Golembeske, C. (2016). The Impact of Motivational Interviewing on Delinquent Behaviors in Incarcerated Adolescents. *Journal of Substance Abuse Treatment*, 65, 13–19. Doi: 10.1016/j.jsat.2015.09.003.

Clair, M., Stein, L. A. R., Soenksen, S., Martin, R. A., Lebeau, R., & Golembeske, C. (2013). Ethnicity as a moderator of motivational interviewing for incarcerated adolescents after release. *Journal of Substance Abuse Treatment*, 45(4), 370–375. <http://doi.org/10.1016/j.jsat.2013.05.006>.

Clarke, J. G., Stein, L. A. R., Martin, R. A., Martin, S. A., Parker, D., Lopes, C. E., ... Bock, B. (2013). Forced Smoking Abstinence: Not Enough for Smoking Cessation. *JAMA Internal Medicine*, 173(9), 789–94. <http://doi.org/10.1001/jamainternmed.2013.197>.

Clarke, M., Jinks, M., & McMurran, M. (2015). Readiness Enhancement Management Strategies (REMS): a proof of concept and evaluation feasibility study of staff training to improve service engagement by people with personality difficulties. *Journal of psychiatric and mental health nursing*, 22(7), 502-509.

- Crane, C. A., & Eckhardt, C. I. (2013). Evaluation of a single-session brief motivational enhancement intervention for partner abusive men. *Journal of Counseling Psychology, 60*(2), 180–187.
- Crane, C. A., Eckhardt, C. I., & Schlauch, R. C. (2015). Motivational enhancement mitigates the effects of problematic alcohol use on treatment compliance among partner violent offenders: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology, 83*(4), 689–695.
- Cullen, F. T., & Gilbert, K. E. (2013). *Reaffirming rehabilitation*. Routledge.
- Culliver, C., Sigler, R., & McNeely, B. (1991). Examining prosocial organizational behavior among correctional officers. *International Journal of Comparative and Applied Criminal Justice, 15*, 277–284.
- D’Amico, E. J., Houck, J. M., Hunter, S. B., Miles, J. N., Osilla, K. C., & Ewing, B. A. (2015). Group motivational interviewing for adolescents: change talk and alcohol and marijuana outcomes. *Journal of consulting and clinical psychology, 83*(1), 68.
- D’Amico, E. J., Hunter, S. B., Miles, J. N. V, Ewing, B. A., & Osilla, K. C. (2013). A randomized controlled trial of a group motivational interviewing intervention for adolescents with a first time alcohol or drug offense. *Journal of Substance Abuse Treatment, 45*(5), 400–408. Doi: 10.1016/j.jsat.2013.06.005.

- Davis, T. M., Baer, J. S., Saxon, A. J., & Kivlahan, D. R. (2003). Brief motivational feedback improves post-incarceration treatment contact among veterans with substance use disorders. *Drug and Alcohol Dependence*, 69(2), 197–203. Doi: 10.1016/S0376-8716(02)00317-4.
- Day, A., Casey, S., Ward, T., Howells, K., & Vess, J. (2010). *Transitions to better lives: Offender readiness and rehabilitation*. Taylor & Francis.
- Day, A., Tucker, K., & Howells, K. (2004). Coerced offender rehabilitation—a defensible practice?. *Psychology, Crime & Law*, 10(3), 259-269.
- Deci, E. L., & Ryan, R. M. (2000). The what and the why of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11, 227–268.
- Dishion, T., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist*, 54, 755–764.
- Dowden, C., & Tellier, C. (2004). Predicting work-related stress in correctional officers: A meta-analysis. *Journal of Criminal Justice*, 32, 31–47.

Drieschner, K. H., & Boomsma, A. (2008). The Treatment Engagement Rating scale (TER) for forensic outpatient treatment: Description, psychometric properties, and norms. *Psychology, Crime & Law*, 14(4), 299-315.

Drieschner, K. H., & Verschuur, J. (2010). Treatment engagement as a predictor of premature treatment termination and treatment outcome in a correctional outpatient sample. *Criminal Behaviour and Mental Health*, 20(2), 86–99. <http://doi.org/10.1002/cbm.757>.

Drieschner, K. H., Lammers, S. M., & van der Staak, C. P. (2004). Treatment motivation: An attempt for clarification of an ambiguous concept. *Clinical Psychology Review*, 23(8), 1115-1137.

Easton, C., Swan, S., & Sinha, R. (2000). Motivation to change substance use among offenders of domestic violence. *Journal of Substance Abuse Treatment*, 19(1), 1-5.

Engle, B., Macgowan, M. J., Wagner, E. F., & Amrhein, P. (2010). Markers of marijuana use outcomes within adolescent substance abuse group treatment. *Research on Social Work Practice*, 20, 271–282.

Feldstein,

Evans, N. J., & Jarvis, P. A. (1986). The Group Attitude Scale: A measure of attraction to group. *Small Group Behavior*, 17, 203-216

- Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C. S. (2013). Organizational stressors associated with job stress and burnout in correctional officers: a systematic review. *BMC Public Health, 13*(1), 82.
- Forsberg, L., Ernst, D., & Farbring, C. Å. (2011). Learning motivational interviewing in a real- life setting: A randomised controlled trial in the Swedish Prison Service. *Criminal Behaviour and Mental Health, 21*(3), 177-188.
- Gmel, G., Venzin, V., Marmet, K., Danko, G., & Labhart, F. (2012). A quasi-randomized group trial of a brief alcohol intervention on risky single occasion drinking among secondary school students. *International Journal of Public Health, 57*(6), 935–944.
- Godley, S. H., Garner, B. R., Passetti, L. L., Funk, R. R., Dennis, M. L., & Godley, M. D. (2010). Adolescent outpatient treatment and continuing care: main findings from a randomized clinical trial. *Drug and Alcohol Dependence, 110*(1–2), 44–54.
- Granhag, P. A., Andersson, L. O., Stromwall, L. A., & Hartwig, M. (2004). Imprisoned knowledge: Criminal’ beliefs about deception. *Legal and Criminological Psychology, 9*, 103–119.

Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary?. *Applied Nursing Research*, 19(1), 38-42.

Harris, D., & Riddy, R. (2008). *The thinking skills programme: Theory manual* (Interventions and Substance Misuse Group). London, UK: Ministry of Justice.

Helstrom, A., Hutchison, K., & Bryan, A. (2007). Motivational enhancement therapy for high-risk adolescent smokers. *Addictive Behaviors*, 32(10), 2404–2410. doi: 10.1016/j.addbeh.2007.02.009

Higgins JPT, Green S, eds. Cochrane Handbook for Systematic Reviews of Interventions, Version 5.1.0. Cochrane Collaboration.
<http://www.cochrane-handbook.org/>.

Higgins, J. P., Altman, D. G., Gøtzsche, P. C., Jüni, P., Moher, D., Oxman, A. D., ... & Sterne, J. A. (2011). The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *Bmj*, 343, d5928.

Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). Offender engagement in group programs and associations with offender characteristics and treatment factors: A review. *Aggression and Violent Behavior*, 19(2), 102–121. Doi: 10.1016/j.avb.2014.01.004

Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). Offender engagement in group programs and associations with offender

characteristics and treatment factors: A review. *Aggression and violent behavior*, 19(2), 102-121.

Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). Offender engagement in group programs and associations with offender characteristics and treatment factors: A review. *Aggression and Violent Behavior*, 19(2), 102–121. [doi: 10.1016/j.avb.2014.01.004](https://doi.org/10.1016/j.avb.2014.01.004)

Hollis, V. (2007, September). Reconviction analysis of programme data using Interim Accredited Programmes Software (IAPS). NOMS.

Hudson, W. W., Nurius, P. S., Daley, J. G., & Newsome, R. D. (1990). A short-form scale to measure peer relations dysfunction. *Journal of Social Service Research*, 13(4), 57-69.

Hunsley, J., & Marsh, H. (2008). *A guide to assessment that work*. New York: Oxford University.

Kaminer, Y. (2005). Challenges and opportunities of group therapy for adolescent substance abuse: A critical review. *Addictive Behaviors*, 30(9), 1765–1774.

Kirton, G., & Guillaume, C. (2015). Employment Relations and Working Conditions in Probation after Transforming Rehabilitation. *London: Queen Mary University of London*.

- Kistenmacher, B. R., & Weiss, R. L. (2008). Motivational Interviewing as a Mechanism for Change in Men Who Batter: A Randomized Controlled Trial. *Violence and Victims*, 23(5), 558–570. doi: 10.1891/0886-6708.23.5.558
- Kleinpeter, C., Koob, J. J., & Chambers, R. (2011). Motivational Interviewing Training for Probation Officers in California. *International Journal of Learning*, 18(2).
- Klinger, E. & Cox, W.M. (2011). The Motivational Structure Questionnaire, Personal Concerns Inventory and their variants: Psychometric properties. In W.M. Cox & E. Klinger (Eds.), *Handbook of Motivational Counselling: Goal-based approaches to assessment and intervention with addiction and other problems* (pp.205–232).
- Kohler, S., & Hofmann, A. (2015). Can motivational interviewing in emergency care reduce alcohol consumption in young people? A systematic review and meta-analysis. *Alcohol and alcoholism*, 50(2), 107-117.
- Lambert, E. G., Hogan, N. L., Moore, B., Tucker, K., Jenkins, M., Stevenson, M., & Jiang, S. (2009). The impact of the work environment on prison staff: The issue of consideration, structure, job variety, and training. *American Journal of Criminal Justice*, 34(3-4), 166.

- Lapham, S. C., C'de Baca, J., Chang, I., Hunt, W. C., & Berger, L. R. (2002). Are drunk-driving offenders referred for screening accurately reporting their drug use?. *Drug and Alcohol Dependence*, 66(3), 243-253.
- Laub, J. H., & Sampson, R. J. (2001). Understanding desistance from crime. *Crime and justice*, 28, 1-69.
- LeBel, T. P., Burnett, R., Maruna, S., & Bushway, S. (2008). The chicken and egg of subjective and social factors in desistance from crime. *European Journal of Criminology*, 5(2), 131-159.
- Leukefeld, C., Roberto, H., Hiller, M., Webster, M., Logan, T., & Staton-Tindall, M. (2003). HIV Prevention Among High-Risk and Hard-to-Reach Rural Residents. *Journal of Psychoactive Drugs*, 35(4), 427-434. Doi: 10.1080/02791072.2003.10400489
- Levenson, J. S., & Macgowan, M. J. (2004). Engagement, denial and treatment progress among sex offenders in group therapy. *Sexual Abuse: A Journal of Research and Treatment*, 16(1), 49-63.
- Levenson, J. S., Macgowan, M. J., Morin, J. W., & Cotter, L. P. (2009). Perceptions of sex offenders about treatment: Satisfaction and engagement in group therapy. *Sexual Abuse*, 21(1), 35-56.

Levenson, J. S., Macgowan, M. J., Morin, J. W., & Cotter, L. P. (2009).

Perceptions of sex offenders about treatment: Satisfaction and engagement in therapy. *Sexual Abuse: A Journal of Research and Treatment*, 21(1), 35-56.

Levenson, J. S., Prescott, D. S., & D'Amora, D. A. (2010). Sex offender

treatment: Consumer satisfaction and engagement in therapy.

International Journal of Offender Therapy and Comparative Criminology, 54(3), 307-326.

Levin, K. G. (2006). Involuntary clients are different: Strategies for group

engagement using individual relational theories in synergy with

group development theories. *Groupwork*, 16(2), 61-84.

Li, L., Zhu, S., Tse, N., Tse, S., & Wong, P. (2016). Effectiveness of

motivational interviewing to reduce illicit drug use in adolescents: a

systematic review and meta- analysis. *Addiction*. 111, 795-805. Doi:

10.1111/add.13285

Lipsey, M. W., Landenberger, N. A., & Wilson, S. J. (2007). Effects of

cognitive-behavioral programs for criminal offenders. *Campbell*

systematic reviews, 6(1), 27.

Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L.

(2010). A meta-analysis of motivational interviewing: Twenty-five

years of empirical studies. *Research on Social Work Practice*. 20 (2), 137-160. doi: 10.1177/1049731509347850

Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: Twenty-five years of empirical studies. *Research on Social Work Practice*. 2 (20), 137-160

Macgowan, M. A. (2000). Evaluation of a measure of engagement for group work. *Research on Social Work Practice*, 10(3), 348-361.

Macgowan, M. J. (1997). A Measure of Engagement for Social Group Work. *Journal of Social Service Research*, 23(2), 17-37. doi: [10.1300/J079v23n02_02](https://doi.org/10.1300/J079v23n02_02)

Macgowan, M. J. (1997). A measure of engagement for social group work: The groupwork engagement measure (GEM). *Journal of Social Service Research*, 23(2), 17-37.

Macgowan, M. J. (2000). Evaluation of a measure of engagement for group work. *Research on Social Work Practice*, 10(3), 348-361.

Macgowan, M. J. (2003). Increasing engagement in groups: A measurement based approach. *Social Work with Groups*, 26(1), 5-28.

Macgowan, M. J. (2006). The Group Engagement Measure. *Journal of Groups in Addiction & Recovery*, 1(2), 33–52. [doi: 10.1300/J384v01n02_04](https://doi.org/10.1300/J384v01n02_04)

Macgowan, M. J. (2011). *Group Engagement Measure: Overview*.
Unpublished Manuscript.

Macgowan, M. J., & Levenson, J. S. (2003). Psychometrics of the Group Engagement Measure with male sex offenders. *Small Group Research*, 34(2), 155-169.

Macgowan, M. J., & Newman, F. L. (2005). Factor structure of the group engagement measure. *Social Work Research*, 29(2), 107-118.

Macgowan, M. J., & Newman, F. L. (2005). The factor structure of the Group Engagement Measure. *Social Work Research*, 29(2), 107-118.

MacKenzie, K.R. (1981). Measurement of group climate. *International Journal of Group Psychotherapy*, 31, 471–480.

Madson, M. B., Loignon, A. C., & Lane, C. (2009). Training in motivational interviewing: A systematic review. *Journal of substance abuse treatment*, 36(1), 101-109.

- Markland, D., Ryan, R. M., Tobin, V. J., & Rollnick, S. (2005). Motivational Interviewing and Self-Determination Theory. *Journal of Social and Clinical Psychology*. doi:10.1521/jscp.2005.24.6.811
- Markland, D., Ryan, R. M., Tobin, V. J., & Rollnick, S. (2005). Motivational interviewing and self-determination theory. *Journal of social and clinical psychology*, 24(6), 811-831.
- Marlowe, D. B., Festinger, D. S., Dugosh, K. L., Benasutti, K. M., Fox, G., & Harron, A. (2014). An experimental trial of adaptive programming in drug court: outcomes at 6, 12 and 18 months. *Journal of experimental criminology*, 10(2), 129-149.
- McGuire, J. (2006). General offending behaviour programmes: Concept, theory, and practice. *Offending behaviour programmes: Development, application, and controversies*, 69-111.
- McHarg, J., Kay, E. J., & Coombes, L. R. (2012). Students' engagement with their group in a problem-based learning curriculum. *European Journal of Dental Education*, 16(1), e106-e110.
- McMurrin M, Theodosi E, (2007). Is treatment non-completion associated with increased reconviction over no treatment? *Psychology, Crime & Law* 13: 333-343. doi:10.1080/10683160601060374

- McMurran, M. (2009). Motivational interviewing with offenders: A systematic review. *Legal and Criminological Psychology*, 14, 83–100. doi:10.1348/135532508X278326
- McMurran, M. (2009). Motivational interviewing with offenders: A systematic review. *Legal and Criminological Psychology*, 14, 83–100. doi: 10.1348/135532508X278326
- McMurran, M., & Theodosi, E. (2007). Is treatment non-completion associated with increased reconviction over no treatment? *Psychology, Crime and Law*, 13, 333–343. doi: 10.1080/10683160601060374
- McMurran, M., & Ward, T. (2010). Treatment readiness, treatment engagement and behaviour change. *Criminal Behaviour and Mental Health*, 20(2), 75-85. [doi:10.1002/cbm.762](https://doi.org/10.1002/cbm.762)
- McMurran, M., Cox, W. M., Coupe, S., Whitham, D., & Hedges, L. (2013). The addition of a goal-based motivational interview to standardised treatment as usual to reduce dropouts in a service for patients with personality disorder: a feasibility study. *Trials*, 11(1), 98. [doi:10.1186/1745-6215-11-98](https://doi.org/10.1186/1745-6215-11-98)
- McMurran, M., Theodosi, E., Sweeney, A., & Sellen, J. (2008). What do prisoners want? Current concerns of adult male prisoners. *Psychology, Crime & Law*, 14, 267–274. doi: 10.1080/10683160701770161

Miles, H., Duthiel, L., Welsby, I., & Haider, D. (2007). 'Just say no': A preliminary evaluation of a three-stage model of integrated treatment for substance use problems in conditions of medium security. *Journal of Forensic Psychiatry and Psychology*, 18, 141–159

Miller WR, Rollnick S (2002) Motivational Interviewing: Preparing People for Change. New York: Guilford Press. Miller

Miller, W. R. (1983). Motivational interviewing with problem drinkers. *Behavioural psychotherapy*, 11(02), 147-172.

Miller, W. R. and Rollnick, S. (eds) (1991) Motivational Interviewing: Preparing People to Change Addictive Behaviour, New York, The Guilford Press. Whitehead,

Miller, W. R., & Mount, K. A. (2001). A small study of training in motivational interviewing: Does one workshop change clinician and client behaviour? *Behavioural and Cognitive Psychotherapy*, 29, 457–471.

Miller, W. R., & Rollnick, S. (2002). Motivational interviewing: preparing people for change. 2002. *New York: Guilford Press Google Scholar*.

Miller, W.R. (1983). Motivational interviewing with problem drinkers. *Behavioural Psychotherapy*, 11, 147–172.

Miller, W.R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York: Guilford Press.\

Mills, J. F., Kroner, D. G., & Loza, W. (2003). Predictive validity despite social desirability: Evidence for the robustness of self-report among offenders. *Criminal Behaviour and Mental Health*, 13, 140-150.

Mills, J. F., Loza, W., & Kroner, D. G. (2003). Predictive validity despite social desirability: evidence for the robustness of self-report among offenders. *Criminal Behaviour and Mental Health*, 13(2), 140-150.

Montgomery, L., Petry, N. M., & Carroll, K. M. (2012). Moderating effects of race in clinical trial participation and outcomes among marijuana-dependent young adults. *Drug and Alcohol Dependence*, 126(3), 333-339. doi: 10.1016/j.drugalcdep.2012.05.033

Mossière, A., & Serin, R. (2014). A critique of models and measures of treatment readiness in offenders. *Aggression and Violent Behavior*, 19(4), 383-389. doi: 10.1016/j.avb.2014.06.004

Mossière, A., & Serin, R. (2014). A critique of models and measures of treatment readiness in offenders. *Aggression and Violent Behavior*, 19, 383-389. doi: 10.1016/j.avb.2014.06.004

Moyers, T. B., Martin, T., Manuel, J. K., Miller, W. R., & Ernst, D. (2010). Revised global scales: Motivational interviewing treatment integrity

3.1.1 (MITI 3.1.1). [http:// casaa.unm.edu/download/miti3.pdf](http://casaa.unm.edu/download/miti3.pdf)

Pierson,

Musser, P. H., & Murphy, C. M. (2009). Motivational interviewing with perpetrators of intimate partner abuse. *Journal of clinical psychology*, 65(11), 1218-1231.

Nirenberg, T., Baird, J., Longabaugh, R., & Mello, M. J. (2013). Motivational counseling reduces future police charges in court referred youth. *Accident Analysis & Prevention*, 53, 89-99.

Nirenberg, T., Longabaugh, R., Baird, J., & Mello, M. J. (2013). Treatment may influence self-report and jeopardize our understanding of outcome. *Journal of Studies on Alcohol and Drugs*, 74(5), 770–6.

NOMS (2015). National standards for the management of offenders: practice framework.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/454668/National_Standards_Practice_Framework_August_2015.pdf

Ogrodniczuk, J. S., Joyce, A. S., & Piper, W. E. (2005). Strategies for reducing patient-initiated premature termination of psychotherapy. *Harvard Review of Psychiatry*, 13, 57–70. [doi: 10.1080/10673220590956429](https://doi.org/10.1080/10673220590956429)

- Ogrodniczuk, J. S., Joyce, A. S., & Piper, W. E. (2005). Strategies for reducing patient-initiated premature termination of psychotherapy. *Harvard review of psychiatry*, 13(2), 57-70.
- Olmstead, T. A., Sindelar, J. L., Easton, C. J., & Carroll, K. M. (2007). The cost- effectiveness of four treatments for marijuana dependence. *Addiction*, 102(9), 1443-1453.
- Ouimet, M. C., Dongier, M., Di Leo, I., Legault, L., Tremblay, J., Chanut, F., & Brown, T. G. (2013). A Randomized Controlled Trial of Brief Motivational Interviewing in Impaired Driving Recidivists: A 5- Year Follow- Up of Traffic Offenses and Crashes. *Alcoholism: clinical and experimental research*, 37(11), 1979-1985.
- Palmer, C., Heggs, D., & Sellen, J. (2013). Exploring motivation and personal change in males serving probation orders within the community: A qualitative pilot study. *Forensic Update Annual Compendium*, 109, 147-159.
- Pettus-Davis, C., Howard, M. O., Roberts-Lewis, A., & Scheyett, A. M. (2011). Naturally occurring social support in interventions for former prisoners with substance use disorders: Conceptual framework and program model. *Journal of Criminal Justice*, 39(6), 479–488. doi: 10.1016/j.jcrimjus.2011.09.002
- Porter, S., & Woodworth, M. (2007). I’m sorry I did it: but he started it: A comparison of the official and self-reported homicide descriptions of

psychopath and non-psychopaths. *Law and Human Behavior*, 31, 91–107.

Prado, G., Pantin, H., Schwartz, S. J., Lupei, N. S., & Szapocznik, J. (2006). Predictors of engagement and retention into a parent-centered, ecodevelopmental HIV preventive intervention for Hispanic adolescents and their families. *Journal of Pediatric Psychology*, 31(9), 874-890.

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice*, 19, 276–288.

Prochaska, J. O., & DiClemente, C. C. (1984). Self change processes, self efficacy and decisional balance across five stages of smoking cessation. *Progress in clinical and biological research*, 156, 131.

Romano, M., & Peters, L. (2015). Evaluating the mechanisms of change in motivational interviewing in the treatment of mental health problems: A review and meta-analysis. *Clinical psychology review*, 38, 1-12.

Roque, L., & Lurigio, A. J. (2009). An outcome evaluation of a treatment readiness group program for probationers with substance use problems. *Journal of Offender Rehabilitation*, 48(8), 744–757. [doi: 10.1080/10509670903288046](https://doi.org/10.1080/10509670903288046).

- Rosenblum, A., Foote, J., Cleland, C., Magura, S., Mahmood, D., & Kosanke, N. (2005). Moderators of effects of motivational enhancements to cognitive behavioral therapy. *The American Journal of Drug and Alcohol Abuse*, 31(1), 35–58. doi: 10.1081/ADA-200037562
- Rounsaville, D. B., Hunkele, K., Easton, C. J., Nich, C., & Carroll, K. M. (2008). Making consent more informed: Preliminary results from a multiple-choice test among probation-referred marijuana users entering a randomized clinical trial. *The journal of the American Academy of Psychiatry and the Law*, 36(3), 354.
- Rubak, S., Sandbæk, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: a systematic review and meta-analysis. *Br J Gen Pract*, 55(513), 305-312.
- Rubak, S., Sandbæk, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: a systematic review and meta-analysis. *Br J Gen Pract*, 55(513), 305-312.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, 55(1), 68–78. doi: [10.1037/0003-066X.55.1.68](https://doi.org/10.1037/0003-066X.55.1.68)

- Sadler, G. (2010). Evaluation of the impact of the HM Prison Service Enhanced Thinking Skills programme on reoffending. *Outcomes of the Surveying Prisoner Crime Reduction (SPCR) sample. England: Ministry of Justice.*
- Sample, P. A., Boden, C., Zhang, Z., Pascual, J., Lee, T., Zangwill, L. M., ... Goldbaum, M. (2007). NIH Public Access. *Methods*, 46(10), 3684–3692. doi: 10.1038/nature09421
- Sampson, C. J., James, M., Huband, N., Geelan, S., & McMurren, M. (2013). Cost implications of treatment non- completion in a forensic personality disorder service. *Criminal Behaviour and Mental Health*, 23(5), 321-335.
- Schaufeli, W. B., & Peeters, M. C. (2000). Job stress and burnout among correctional officers: A literature review. *International Journal of Stress Management*, 7(1), 19-48.
- Schmiege, S. J., Broaddus, M. R., Levin, M., & Bryan, A. D. (2009). Randomized trial of group interventions to reduce HIV/STD risk and change theoretical mediators among detained adolescents. *Journal of consulting and clinical psychology*, 77(1), 38.
- Schneider, S. L., & Wright, R. C. (2001). The FoSOD: A measurement tool for reconceptualizing the role of denial in child molesters. *Journal of Interpersonal Violence*, 16(6), 545-564.

Schwalbe, C. S., Oh, H. Y., & Zweben, A. (2014). Sustaining motivational interviewing: A meta- analysis of training studies. *Addiction, 109*(8), 1287-1294.

Scott, K., King, C., McGinn, H., & Hosseini, N. (2011). Effects of motivational enhancement on immediate outcomes of batterer intervention. *Journal of Family Violence, 26*(2), 139-149.

Sellen, J. L., Gobbett, M., & Campbell, J. (2013). Enhancing treatment engagement in sexual offenders: A pilot study to explore the utility of the Personal Aspirations and Concerns Inventory for Offenders (PACI-O). *Criminal Behaviour and Mental Health, 23*, 203–216.
[doi:10.1002/cbm.1868](https://doi.org/10.1002/cbm.1868)

Sellen, J. L., Gobbett, M., & Campbell, J. (2013). Enhancing treatment engagement in sexual offenders: A pilot study to explore the utility of the Personal Aspirations and Concerns Inventory for Offenders (PACI- O). *Criminal Behaviour and Mental Health, 23*(3), 203-216.

Serin, R., & Kennedy, S. (1997). Treatment readiness and responsivity: Contributing to effective correctional programming (Research Report R-54). Correctional Services of Canada.

- Shapiro, C. J., Smith, B. H., Malone, P. S., & Collaro, A. L. (2010). Natural experiment in deviant peer exposure and youth recidivism. *Journal of Clinical Child & Adolescent Psychology, 39*(2), 242-251.
- Simpson, Walters, S. T., Matson, S. A., Baer, J. S., & Ziedonis, D. M. (2005). Effectiveness of workshop training for psychosocial addiction treatments: a systematic review. *Journal of substance abuse treatment, 29*(4), 283-293.
- Sinha, R., Easton, C., Renee-Aubin, L., & Carroll, K. M. (2003). Engaging Young Probation-referred Marijuana-abusing Individuals in Treatment: A Pilot Trial. *American Journal on Addictions, 12*(4), 314-323. doi: 10.1080/10550490390226905
- Skeem, J. L., Loudon, J. E., Polaschek, D., & Camp, J. (2007). Assessing relationship quality in mandated community treatment: blending care with control. *Psychological Assessment, 19*, 397-410.
- Söderlund, L. L., Madson, M. B., Rubak, S., & Nilsen, P. (2011). A systematic review of motivational interviewing training for general health care practitioners. *Patient education and counseling, 84*(1), 16-26.
- Spohr, S. A., Taxman, F. S., Rodriguez, M., & Walters, S. T. (2016). Motivational Interviewing Fidelity in a Community Corrections Setting: Treatment Initiation and Subsequent Drug Use. *Journal of*

Substance Abuse Treatment, 65, 20–25. doi:
10.1016/j.jsat.2015.07.012

Stein, L. a R., Lebeau, R., Colby, S. M., Barnett, N. P., Golembeske, C., & Monti, P. M. (2011). Motivational interviewing for incarcerated adolescents: effects of depressive symptoms on reducing alcohol and marijuana use after release. *Journal of Studies on Alcohol and Drugs*, 72(3), 497–506.

Stein, L. A. R., Clair, M., Lebeau, R., Colby, S. M., Barnett, N. P., Golembeske, C., & Monti, P. M. (2011). Motivational interviewing to reduce substance-related consequences: effects for incarcerated adolescents with depressed mood. *Drug and Alcohol Dependence*, 118(2–3), 475–478.

Stein, L. A., Colby, S. M., Barnett, N. P., Monti, P. M., Golembeske, C., & Lebeau- Craven, R. (2006). Effects of motivational interviewing for incarcerated adolescents on driving under the influence after release. *The American Journal on Addictions*, 15(s1), s50-s57.

Stewart, L., & Millson, W. (1995). Offender motivation for treatment as a responsivity factor. In *Forum on Corrections Research* (Vol. 7, No. 3, pp. 5-7).

- Streiner, D. L. (2003) Starting at the beginning: an introduction to coefficient alpha and internal consistency, *Journal of Personality Assessment, 80*, 99-103
- Strong, D. R., Caviness, C., Anderson, B., Brown, R. A., & Stein, M. (2010). Assessing the severity of hazardous drinking and related consequences among incarcerated women. *Alcoholism: Clinical and Experimental Research, 34*(5), 907–914. doi: 10.1111/j.1530-0277.2010.01163.x
- Sturgess, D., Woodhams, J., & Tonkin, M. (2016). Treatment engagement from the perspective of the offender: reasons for noncompletion and completion of treatment—a systematic review. *International journal of offender therapy and comparative criminology, 60*(16), 1873-1896. doi: [10.1177/0306624X15586038](https://doi.org/10.1177/0306624X15586038)
- Swogger, M. T., Conner, K. R., Caine, E. D., Trabold, N., Parkhurst, M. N., Prothero, L. M., & Maisto, S. A. (2016). A test of core psychopathic traits as a moderator of the efficacy of a brief motivational intervention for substance-using offenders. *Journal of Consulting and Clinical Psychology, 84*(3), 248–258.
- Tan, L., & Grace, R. C. (2008). Social desirability and sexual offenders a review. *Sexual Abuse: A Journal of Research and Treatment, 20*(1), 61-87.

- Tapia, M. I., Schwartz, S. J., Prado, G., Lopez, B., & Pantin, H. (2006). Parent-centered intervention: A practical approach for preventing drug abuse in Hispanic adolescents. *Research on Social Work Practice, 16*(2), 146-165.
- Taxman, F. S., Walters, S. T., Rodriguez, M. (2015). Motivational tools to improve probationer treatment outcomes. *Contemporary Clinical Trials, 43*, 120-128.
- Teitelman, A. M., Dichter, M. E., Cederbaum, J. A., & Campbell, J. C. (2007). Intimate partner violence, condom use and HIV risk for adolescent girls: Gaps in the literature and future directions for research and intervention. *Journal of HIV/AIDS Prevention in Children & Youth, 8*(2), 65-93. Doi: 10.1300/J499v08n02
- Tetley, A., Jinks, M., Huband, N., & Howells, K. (2011). A systematic review of measures of therapeutic engagement in psychosocial and psychological treatment. *Journal of Clinical Psychology, 67*(9), 927-941. [Doi: 10.1002/jclp.20811](https://doi.org/10.1002/jclp.20811)
- Tetley, A., Jinks, M., Huband, N., & Howells, K. (2011). A systematic review of measures of therapeutic engagement in psychosocial and psychological treatment. *Journal of Clinical Psychology, 67*(9), 927-941. <http://doi.org/10.1002/jclp.20811>

- Theodosi, E., & McMurran, M. (2006). Motivating convicted sex offenders into treatment: A pilot study. *The British Journal of Forensic Practice*, 8(3), 28-35. doi: 10.1108/14636646200600017
- Utter, G. H., Young, J. B., Theard, L. a, Cropp, D. M., Mohar, C. J., Eisenberg, D., ... Owens, L. J. (2014). The effect on problematic drinking behavior of a brief motivational interview shortly after a first arrest for driving under the influence of alcohol: a randomized trial. *The Journal of Trauma and Acute Care Surgery*, 76(3), 661-70-1. doi: 10.1097/TA.0000000000000144
- Valentine, J. C., Pigott, T. D., & Rothstein, H. R. (2010). How many studies do you need? A primer on statistical power for meta-analysis. *Journal of Educational and Behavioral Statistics*, 35(2), 215-247.
- Van Voorhis, P. (2012). On behalf of women offenders. *Criminology & Public Policy*, 11(2), 111-145.
- VanBuskirk, K. A., & Wetherell, J. L. (2014). Motivational interviewing with primary care populations: a systematic review and meta-analysis. *Journal of behavioral medicine*, 37(4), 768-780.
- Walters, S. T., Clark, M. D., Gingerich, R., & Meltzer, M. L. (2007). *Motivating offenders to change: A guide for probation and*

parole. Washington, DC: US Department of Justice, National Institute of Corrections.

Walters, S. T., Ondersma, S. J., Ingersoll, K. S., Rodriguez, M., Lerch, J., Rossheim, M. E., & Taxman, F. S. (2014). MAPIT: Development of a web-based intervention targeting substance abuse treatment in the criminal justice system. *Journal of Substance Abuse Treatment*, 46(1), 60–65. doi: 10.1016/j.jsat.2013.07.003

Walters, S. T., Vader, A. M., Nguyen, N., Harris, T. R., & Eells, J. (2010). Motivational interviewing as a supervision strategy in probation: A randomized effectiveness trial. *Journal of Offender Rehabilitation*, 49(5), 309-323.

Walters, S. T., Vader, A. M., Nguyen, N., Harris, T. R., & Eells, J. (2010). Motivational interviewing as a supervision strategy in probation: A randomized effectiveness trial. *Journal of Offender Rehabilitation*, 49(5), 309-323.

Walters, S. T., Vader, A. M., Nguyen, N., Harris, T. R., & Eells, J. (2010). Motivational Interviewing as a Supervision Strategy in Probation: A Randomized Effectiveness Trial. *Journal of Offender Rehabilitation*, 49(1), 309–323. [doi:10.1080/10509674.2010.489455](https://doi.org/10.1080/10509674.2010.489455)

Wang, L.-J., Lu, S.-F., Chong, M.-Y., Chou, W.-J., Hsieh, Y.-L., Tsai, T.-N., ... Lee, Y.-H. (2016). A family-oriented therapy program for youths

with substance abuse: Long-term outcomes related to relapse and academic or social status. *Neuropsychiatric Disease and Treatment*, 12, 699–706.

Wengraf, T. (2001). *Qualitative research interviewing: Biographic narrative and semi-structured methods*. Sage.

Ward T, Stewart C. A. (2003). Criminogenic needs and human needs: A theoretical model. *Psychology, Crime & Law* 9: 125–143.

Ward, T., Day, A., Howells, K., & Birgden, A. (2004). The multifactor offender readiness model. *Aggression and violent behavior*, 9(6), 645-673.

Ward, T., Day, A., Howells, K., & Birgden, A. (2004). The multifactor offender readiness model. *Aggression and violent behavior*, 9(6), 645-673.

Ward, T., Day, A., Howells, K., & Birgden, A. (2004). The multifactor offender readiness model. *Aggression and violent behavior*, 9(6), 645-673. doi: 10.1016/j.avb.2003.08.001

Weir, B. W., O'Brien, K., Bard, R. S., Casciato, C. J., Maher, J. E., Dent, C. W., ... & Stark, M. J. (2009). Reducing HIV and partner violence risk among women with criminal justice system involvement: a

randomized controlled trial of two motivational interviewing-based interventions. *AIDS and Behavior*, 13(3), 509-522.

Wells, S. A., Smyth, T., & Brown, T. G. (2012). Patient attitudes towards change in adapted motivational interviewing for substance abuse: a systematic review. *Substance abuse and rehabilitation*, 3, 61.

Woodall, W. G., Delaney, H. D., Kunitz, S. J., Westerberg, V. S., & Zhao, H. (2007). A randomized trial of a DWI intervention program for first offenders: Outcomes and interactions with antisocial personality disorder among a primarily American-Indian sample. *Alcoholism: Clinical and Experimental Research*, 31, 974-987.

Woodall, W. G., Delaney, H. D., Kunitz, S. J., Westerberg, V. S., & Zhao, H. (2007). A randomized trial of a DWI intervention program for first offenders: Intervention outcomes and interactions with antisocial personality disorder among a primarily American-Indian sample. *Alcoholism: Clinical and Experimental Research*, 31(6), 974-987. doi: 10.1111/j.1530-0277.2007.00380.x

Zemore, S. E. (2012). The effect of social desirability on reported motivation, substance use severity, and treatment attendance. *Journal of substance abuse treatment*, 42(4), 400-412.

List of Appendices

Appendix 1 - Inclusion and exclusion criteria for the systematic review

Inclusion Criteria:

Population: Anyone that has committed a crime, recently or in the past
AND the authors refer to them or consider them as offenders.

Intervention: face-to-face MI, the authors have to refer to the
intervention as MI and MI has to be the main focus of the intervention.
The variation of MI can all be included: Brief Motivational Interviewing
(BMI or BI), Motivational Enhancement Therapy (MET) and MI on its own.
Group or individual sessions all accepted. The studies have to be RCTs.

Control: No intervention, providing information, doing the assessments
per usual, TAU, community service, watching a video etc.

Outcome: Change in alcohol consumption (e.g. AUDIT, TFLB, blood
tests), substance misuse (e.g. ASI, TLFB), recidivism (police/probation
records, self-reports), engagement (attendance, dropouts, engagement
measures) etc. All outcome measures require a follow-up.

Exclusion Criteria:

Population: Non-forensic sample, rule violations (e.g. college alcohol policies), severe learning disabilities.

Intervention: Composite interventions that include MI and another form of active intervention, such as treatment packages (i.e. CBT delivered in MI style), very intense form of MI (e.g. duration of more than 10 sessions), MI delivered digitally.

Control: Any intervention that has shown to have an evidence base or to have shown to be effective at making a change in terms of alcohol consumption, substance misuse, recidivism and engagement.

Outcome: None

Appendix 2 – List of excluded studies and reasons for exclusions.

Table 3 – Excluded studies and the reasons for exclusions.

Study	Reason For Exclusion
Baker et al. (2004)	Not a forensic sample.
Ball et al. (2007)	Not a forensic sample.
Battjes et al. (2004)	Not a forensic sample.
Carroll et al. (2006)	No control condition. The intervention is a combination of MI and another active intervention.
Cimini et al. (2009)	Not a forensic sample.
Clarke et al. (2013)	The intervention is a combination of MI and another active intervention.
D’Amico et al. (2015)	Not RCT.
Easton et al. (2000)	The intervention is a combination of MI and another active intervention.
Forsberg et al. (2011)	Not a forensic sample.
Gmel et al. (2012)	Not a forensic sample. Not RCT.
Godley et al. (2010)	Sample is 75% forensic, the rest are not.
Kistenmacher & Weiss (2008)	Assesses readiness to change/attitude and therefore does not relate to either of our outcomes.
Leukefeld et al. (2003)	Not clear if it is RCT.
Lincourt et al. (2002)	Not randomised. The intervention is a combination of MI and another active intervention
Marlowe et al. (2013)	Intervention is not MI.
Montgomery et al. (2012)	No control condition, the intervention is a combination of MI and another active intervention.
Musser & Murphey (2009)	Not RCT.
Olmstead et al. (2007)	No control condition, the intervention is a combination of MI and another active intervention.
Pettus-Davis et al. (2011)	Not an experimental article.
Rosenblum et al. (2009)	Not a forensic sample. No control.

Rounsaville et al. (2008)	Not RCT. Not MI.
Schmiede et al. (2009)	Control has shown to be effective at influencing outcome.
Scott et al. (2011)	Not RCT.
Sinha et al. (2003)	No control
Spohr et al. (2015)	Not RCT.
Strong et al. (2010)	Not MI.
Taxman et al. (2015)	Only a protocol.
Walter et al. (2014)	Not RCT.
Walters et al. (2010)	MI was first done to officers and then to inmates, so was not directly given to offender population.
Wang et al. (2016)	Not RCT.
Weir et al. (2009)	Control has shown to be effective at influencing outcome.
Woodall et al. (2007)	The intervention is a combination of MI and another active intervention.

Appendix 3 – Participants' consent form (facilitators)



(Form to be printed on local headed paper)

FACILITATOR CONSENT FORM Final version 1.0: 01-03-16

Title of Study: Does training staff in engagement techniques improve offenders' engagement in the Thinking Skills Programme?

REC ref: To be added after approval

Name of Researchers: Mehdi Alemohammad (DForensPsy Student); Dr Katy Jones (Assistant Professor of Applied Psychology)

Name of Participant:

Please initial box

1. I confirm that I have read and understand the information sheet version numberdated..... for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. I understand that should I withdraw then the information collected so far cannot be erased and that this information may still be used in the project analysis. ☐
3. I understand that relevant sections of my data collected in the study may be looked at by the research group and by other responsible individuals for monitoring and audit purposes. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this study. I understand that my personal details will be kept confidential. ☐
4. I understand that all data will be anonymous and confidential with the exception of disclosed criminal offences that are not known about or by the disclosure of potential risks to another person or to myself. ☐
5. I have been given the opportunity to ask questions and discuss the study with one of the above investigators or their deputies on all aspects of the study and have understood the advice and information given as a result. ☐
6. I understand that I can ask for further instructions or explanations at any time. ☐
7. I understand that information about me recorded during the study will be kept in a secure database. If the data is transferred it will be made anonymous. Data will be kept for 7 years after the study has ended and then securely destroyed. ☐
8. I agree to take part in the above study. ☐

Name of Participant Date Signature

Name of Person taking consent Date Signature

2 copies: 1 for participant, 1 for the project notes.

Engagement in a Thinking Skills Programme. Facilitator Information Sheet. Version 1. 01-03-16

Appendix 4 – Participants' consent form (probationers)



(Form to be printed on local headed paper)

THINKING SKILLS PROGRAMME PARTICIPANT CONSENT FORM Final version 1.0: 01-03-16

Title of Study: Does training staff in engagement techniques improve participants' overall experience of the Thinking Skills Programme?

REC ref: To be added after approval

Name of Researchers: Mehdi Alemohammad (DForensPsy Student); Dr Katy Jones (Assistant Professor of Applied Psychology)

Name of Participant:

Please initial box

1. I confirm that I have read and understand the information sheet version numberdated..... for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. I understand that should I withdraw then the information collected so far cannot be erased and that this information may still be used in the project analysis. ☐
3. I understand that relevant sections of my data collected in the study may be looked at by the research group and by other responsible individuals for monitoring and audit purposes. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this study. I understand that my personal details will be kept confidential. ☐
4. I understand that all data will be anonymous and confidential with the exception of disclosed criminal offences that are not known about or by the disclosure of potential risks to another person or to myself. ☐
5. I have been given the opportunity to ask questions and discuss the study with one of the above investigators or their deputies on all aspects of the study and have understood the advice and information given as a result. ☐
6. I understand that I can ask for further instructions or explanations at any time. ☐
7. I understand that information about me recorded during the study will be kept in a secure database. If the data is transferred it will be made anonymous. Data will be kept for 7 years after the study has ended and then securely destroyed. ☐
8. I agree to take part in the above study. ☐

Name of Participant Date Signature

Name of Person taking consent Date Signature

2 copies: 1 for participant, 1 for the project notes.

Engagement in a Thinking Skills Programme. TSP Participant Information Sheet. Version 1. 01-03-16

Appendix 5 – Participants' information sheet (facilitators)



The University of
Nottingham

Division of Psychiatry and Applied Psychology

Facilitator Information Sheet

Version 1 Date: 01-03-16

Title of Study: Does training staff in motivational techniques improve offenders' engagement in the Thinking Skills Programme?

Study ID – M16032016

Name of Researcher(s): Mehdi Alemohammad (DForensPsy Student); Dr Katy Jones (Assistant Professor of Applied Psychology)

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

What is the purpose of the study?

Treatment non-engagement is an endemic problem within probation settings and research has shown that dropout rates from group programmes such as TSP are high, sometimes up to 50%. There is some evidence that training staff with specific skills will improve treatment engagement and reduce attrition. However, in order to find out whether this training is effective, a controlled research study is required to compare those who have received the training and those who haven't.

This study aims to train some staff with specific techniques to help offenders remain engaged in these groups. The staff that are not selected to receive the training will run their TSP group as normal. The aim is to compare group engagement between the staff who have been trained and those who haven't. We also aim to investigate staff member's ideas about how engaged offenders are in these groups, and what we should do in the future.

Why have I been invited?

You are being invited to take part because you are a staff member who runs a Thinking Skills Programme to probationers. We have selected several different sites, and are aiming to recruit all TSP facilitators from each site.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. This would not affect your legal rights.

What will happen to me if I take part?

After you have agreed to participate in this study and to sign the consent form, the researcher will ask you a few demographic questions (sex, age, ethnicity, background discipline, level of education and experience). You will then be notified about whether you are allocated to the training or non-training groups. This will be a random decision (by a coin toss). If your site was selected to receive the training, you will receive a subsequent email from the principal investigator of the study (Mehdi Alemohammad), which will provide you with further details on how to attend the training. See below for further details after you have been allocated to your groups.

If you are selected for training

If your site is identified for training, you would attend a half-day training course which is likely to be at one of the probation venues within your geographical base. You will complete a brief questionnaire before and right after the training. You will be paid as normal for the hours you spend on the training by RISE. You will then deliver TSP and record all information about the individuals in the group sessions as usual. You will be required to rate offenders' engagement on a scale of 1-5 after each TSP group session on nDelius notes.

Before TSP starts, you will be asked to speak to offenders during the preparation group session to ask if they are willing to speak to the researcher with a view to participating in the research. The involvement of offenders is to attend the TSP groups as they normally would. However, they will be asked to complete a short questionnaire at the end of the TSP. This applies to both completers and non-completers.

Once TSP has begun, you are only expected to complete the routine tasks that you normally would do when delivering TSP (e.g. rating engagement, registering attendance etc.). However, I would like to invite you to assess TSP participants at the end of the programme on a scale of engagement. This should not take more than an hour for the whole group. You will also receive a questionnaire in which you will be asked to rate the training session across several domains and also provide further feedback on how useful you found the training session in general.

If you are not selected for training

If your site is not randomly selected then you will run your TSP group as usual. You will be asked to record all information about the individuals in the group sessions. You will be required to rate offenders' engagement on a scale of 1-5 after each TSP group session on nDelius notes. You will also be asked to assess TSP participants at the end of the programme using the same scale of engagement.

Expenses and inconvenience allowance

You will not be offered any expenses or inconvenience allowance for taking part in this study. However, you will be paid as normal for attending the training session if your site is selected to receive the training.

What are the possible disadvantages and risks of taking part?

The risk or disadvantages of taking part in this study are minimal. We aim to not ask you to do any other significant work than you would usually do when running this group. Arguably, there will be a disadvantage if your site is not selected to receive the training in comparison to the other site. However, if the training shows to be successful, then it may be possible to implement the training as part of the organisation's future routine professional development training.

What are the possible benefits of taking part?

The information we get from your participation in this study may help to inform future research about offender engagement in treatment programmes. If the training is shown to be effective then it may be used to help engagement across other treatment programmes.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you should then contact the Research Ethics Committee Administrator, c/o The University of Nottingham, School of Medicine Education Centre, B Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH. E-mail: louise.sabir@nottingham.ac.uk.

Will my taking part in the study be kept confidential?

We will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, some parts of the data collected for the study will be looked at by authorised persons from the University of Nottingham who are organising

the research. They may also be looked at by authorised people to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and we will do our best to meet this duty.

Minimal information will be collected about you during the study, but any information that is collected (name, site, feedback about the training) will be anonymised, kept **strictly confidential**, stored in a secure and locked office, and on a password protected database.

All research data will be kept securely for 7 years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality, only members of the research team will have access to your personal data.

What will happen if I don't want to carry on with the study?

Your participation is voluntary and you are free to withdraw at any time, without giving any reason.

What will happen to the results of the research study

This study is intended as a pilot in order to inform future research about offender engagement in treatment programmes. Results will be written up as part of a research thesis. Any publication that arises from this research will use anonymised information, no names will be published. If you would like to receive a copy of the results of the study then please contact Mehdi Alemohammad by e-mail on msxsma@nottingham.ac.uk.

Who is organising and funding the research?

This research is being organised by the University of Nottingham as part of the Doctorate in Forensic Psychology (Division of Psychiatry and Applied Psychology).

Who has reviewed the study?

All research in the University of Nottingham is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Medical School Research Ethics Committee.

Further information and contact details

Chief Investigator: Mehdi Alemohammad, E-mail: msxsma@nottingham.ac.uk.

Research supervisor:

Dr Katy Jones, Assistant Professor of Applied Psychology

Division of Psychiatry and Applied Psychology
Institute of Mental Health
University of Nottingham Innovation Park
Triumph Road
Nottingham
NG7 2TU
TEL: 0115 82 30418
Email: katy.jones@nottingham.ac.uk

Thank you again for taking the time to read all this information and volunteering to participate in this study.

Appendix 6 – Participants’ information sheet (probationers)



The University of
Nottingham

Division of Psychiatry and Applied Psychology

TSP Participant Information Sheet

Version 1 Date: 01-03-16

Title of Study: Does staff training improve participants’ overall experience of the Thinking Skills Programme?

Study ID – M16032016

Name of Researcher(s): Mehdi Alemohammad (DForensPsy Student); Dr Katy Jones (Assistant Professor of Applied Psychology)

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

What is the purpose of the study?

Group treatments such as the Thinking Skills Programme (TSP) are important in supporting probationers live a healthy life. However, research has shown that people taking part in these programmes can sometimes find it difficult to commit to the programme and fully benefit from it. This study aims to find out whether extra training for staff members will result in better overall experience for its members.

We are interested in your experience of the TSP, and what you think would help you to keep attending, engaging, and benefit from these groups.

Why have I been invited?

You are being invited to take part because this site has been chosen to take part in the research study. All probationers attending the TSP in these sites are being asked to take part. However, you don’t have to take part in the research (see more detail below).

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. This would not affect your legal rights, your progress or your probation order. If you decide not to take part in this research, you may still have to complete the TSP as part of your probation order. However, your data will not be used in any way for the purpose of this research.

What will happen to me if I take part?

If you decide to take part, you will begin your TSP as normal. You do not have to do any extra work throughout the TSP. Facilitators will comment on how much you've participated in the TSP, both during and after you have completed the programme. The researcher will also collect basic demographic information (age, ethnicity, previous convictions) using the probation's computer system (this information will be anonymised and will remain confidential). At the end of TSP, you will be asked to complete a questionnaire about your overall experience throughout the TSP.

Expenses and inconvenience allowance

You will not be offered any expenses or inconvenience allowance for taking part in this study.

What are the possible disadvantages and risks of taking part?

The risk or disadvantages of taking part in this study are minimal. You will be participating in your group as usual, but will just be asked for your feedback at the end of the programme.

What are the possible benefits of taking part?

The information we get from your participation in this study may help us to improve the TSP.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you should then contact the Research Ethics Committee Administrator, c/o The University of Nottingham, School of Medicine Education Centre, B Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH. E-mail: louise.sabir@nottingham.ac.uk.

Will my taking part in the study be kept confidential?

We will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, some parts of the data collected for the study will be looked at by authorised persons from the University of Nottingham who are organising the research. They may also be looked at by authorised people to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and we will do our best to meet this duty.

Usual information that is routinely collected during the TSP will be collected (for example, how often you attended the sessions). For the purposes of the research your name will not be connected with this information. Any feedback that you give about the programme will be anonymised. After we've collected this information, it will be anonymised (your name removed), kept **strictly confidential**, stored in a secure and locked office, and on a password protected database.

All research data will be kept securely for 7 years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality, only members of the research team will have access to your personal data.

What will happen if I don't want to carry on with the study?

Your participation is voluntary and you are free to withdraw at any time, without giving any reason.

What will happen to the results of the research study

This study is intended to help improve TSPs in the future. Results will be written up as part of a research thesis. Any publication that arises from this research will use anonymised information, no names will be published. If you would like to receive a copy of the results of the study then please contact Mehdi Alemohammad by e-mail on msxsma@nottingham.ac.uk.

Who is organising and funding the research?

This research is being organised by the University of Nottingham as part of the Doctorate in Forensic Psychology (Division of Psychiatry and Applied Psychology).

Who has reviewed the study?

All research in the University of Nottingham is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Medical School Research Ethics Committee and National Offender Management Service (NOMS).

Further information and contact details

Chief Investigator: Mehdi Alemohammad, E-mail: msxsma@nottingham.ac.uk.

Research supervisor:

Dr Katy Jones, Assistant Professor of Applied Psychology
Division of Psychiatry and Applied Psychology
Institute of Mental Health
University of Nottingham Innovation Park
Triumph Road
Nottingham
NG7 2TU

TEL: 0115 82 30418

Email: katy.jones@nottingham.ac.uk

Thank you again for taking the time to read all this information and volunteering to participate in this study.

Appendix 7 – University Ethics Approval Letter



The University of
Nottingham

Faculty of Medicine and Health Sciences

Research Ethics Committee
School of Medicine Education Centre
B Floor, Medical School
Queen's Medical Centre Campus
Nottingham University Hospitals
Nottingham
NG7 2UH

Direct line/e-mail
+44 (0) 115 8232561
Louise.Sabir@nottingham.ac.uk

11th April 2016

Mehdi Alemohammad
Doctoral Trainee Forensic Psychologist
Institute of Mental Health
School of Medicine
University of Nottingham Innovation Park
Triumph Road
Nottingham
NG7 2UH

Dear Mehdi

Ethics Reference No: M16032016 – please always quote

Study Title: Does Training staff engagement techniques improve offender's engagement in the Thinking Skills Programme?

Short title: Engagement in Thinking Skills Programme (TSP)

Chief Investigator: Dr Katy Jones, Assistant Professor of Applied Psychology, Institute of Mental Health, School of Medicine.

Lead Investigator/Student: Mehdi Alemohammad, Doctoral Trainee Forensic Psychologist, Institute of Mental Health, School of Medicine.

Start Date: 01.05.2016 **End Date:** 30.11.2016

No of Subjects: 66+ (18+ yrs)

Thank you for submitting the above application which was considered by the Committee and the following documents were received:

Engagement in Thinking Skills Programme (TSP):

- FMHS Ethics Form V1 01-03-16
- Letter of Support from Dermot Brady, Business Development Manager, RISE
- Project Proposal V1 01-03-16
- Facilitator Information Sheet Version 1. 01-03-16
- Facilitator Consent Form Final version 1.0: 01-03-16
- Outline of Facilitator Training Outline V1 01-03-16
- Groupwork Engagement Measure (GEM-27) Mark J Macgowan 1996
- Facilitator Questionnaire: Training Condition V1 01-03-16
- Facilitator Debriefing V1 01-03-16
- TSP Participant Information Sheet V1 01-03-16
- TSP Participant Information Sheet, Version 1.0: 01-03-16
- GEM questionnaire (Offender version) V1 01-03-16
- TSP Participant Debriefing V1-03-16

These have been reviewed and are satisfactory and the study is approved.

Approval is given on the understanding that the conditions set out below are followed:

1. You must follow the protocol agreed and inform the Committee of any changes using a notification of amendment form (please request a form).



1. You must notify the Chair of any serious or unexpected event.
2. This study is approved for the period of active recruitment requested. The Committee also provides a further 5 year approval for any necessary work to be performed on the study which may arise in the process of publication and peer review.
3. An End of Project Progress Report is completed and returned when the study has finished (Please request a form).

Yours sincerely



Professor Ravi Mahajan
Chair, Faculty of Medicine & Health Sciences Research Ethics Committee

Appendix 8 – London Community Rehabilitation Company

Ethics Approval Letter



APPROVAL FOR CRC RESEARCH

19 July, 2016

Dear Mr Alemohammad:

Thank you for your request to conducting your research project with the London Community Rehabilitation Company.

After reviewing your research proposal, **Does Training Staff in Motivational Techniques Improve Offenders' Engagement in Thinking Skills Programme?**, I am delighted to formally approve your request to perform research within the organisation.

Please note that while we will endeavour to assist you by connecting you with individuals that may be able to assist you, and providing you with useful data, participation with research projects by managers, staff, and service-users, is entirely voluntarily, and that consent may be withdrawn at any time once offered.

If your research changes substantively from the way it's been described within your research proposal, please inform me so that we may consider how the proposed changes may affect the organisation.

At the conclusion of your research, please provide the organisation with a written copy of the final product.

If you have any questions, issues, or concerns, please do not hesitate to ask me at any point during the duration of your research.

Regards,

John Rico,
Research Manager

Appendix 9 – RISE Support Letter



Fao; Ethics Committee, Nottingham University

Rehabilitation and Innovative
Solutions Enterprise (RISE) CIC

151 Buckingham Palace Road
London SW1W 9SZ

T: 0300 048 0036
www.risemutual.org

Does Training Staff in Engagement Techniques Improve Offenders' Engagement and the Thinking Skills Programme (TSP)?

Potential Research Project of Seyed (Mehdi) Alemohammad msxsm@nottingham.ac.uk

Dear Sir/Madam

You will be aware that the above has applied to us to conduct research, as per the proposed title. Mehdi worked for us until relatively recently and has been discussing the research project with us for some time. We will support him in his efforts and are happy to answer any questions you might have about our involvement.

RISE (Rehabilitation and Innovative Solutions Enterprise) is a Criminal Justice Sector Mutual Community Interest Company specialising in the delivery of offending behaviour programmes. We spun out of the public sector this year and it is our intention to support research efforts in our area of practice and expertise and Mehdi's proposal appears to align well with this.

Yours faithfully

Dermot Brady
Business Development Manager

Rehabilitation and Innovative Solutions Enterprise (RISE) CIC
Registered office: First floor 151 Buckingham Palace Road, London SW1W 9SZ. Registered number: 09386646

Appendix 10 – Facilitators’ Demographic questionnaire



**The University of
Nottingham**

Division of Psychiatry and Applied Psychology

Name:

Age:

Sex:

Ethnicity:

Level of Education (e.g. Degree in health sciences):

Background Discipline (e.g. psychology, social work, teaching):

Years/months of Experience (e.g. 3 years as a facilitators, 4 years as a teacher):

Appendix 11 – Pre/Post Training Knowledge Questionnaire

1) According to Multifactor Offender Readiness Model, what are the five internal factors that are important in impacting treatment readiness and engagement?

- a) Cognitive, affective, volitional, behavioural, identity
- b) Motivation, responsivity, competency, therapeutic relationship, identity
- c) Motivation, behavioural, cognitive, alliance, identity
- d) Mentalisation, motivation, self-efficacy, identity, emotions
- e) I don't know

2) The identity factor in MORM is about...

- a) How the offender's personality is influenced by their crimes
- b) Whether the offender maintains a view that he cannot engage in treatment
- c) Whether the offender can see himself living an offence free lifestyle
- d) Whether the offender is aware how his own risk factors reduce his engagement
- e) I don't know

3) The external factors in MORM are:

- a) Environment, network, location, social climate, family, pressure
- b) Location, opportunities, resource, circumstances, programme characteristics, support
- c) Opportunistic, location, antisocial influence, criminal lifestyle, support, social climate
- d) Extrinsic motivation, opportunities, location, resource, antisocial lifestyle, support
- e) I don't know

4) Personal Aspirations & Concerns Inventory for Offenders (PACI-O) is an assessment based on the Good Lives model. Why using assessments such as this have motivational properties.

- a) Because they follow a therapeutic approach and engage offenders in a non-confrontational manner.
- b) Because they are based on the principles of Motivational Interviewing
- c) Because they target antisocial attitudes and resistance in a positive manner
- d) Because they explore and build on offenders' goals and values
- e) I don't know

5) What are some of the areas that PACI-O focuses on collaboratively with the offenders?

- a) Accommodation, relationships, physical & mental wellbeing, recreation, self-changes, employment
- b) Attitudes, strengths, protective factors, friendships, employment, education
- c) Affect, motivation, hobbies, finances, employment, substance misuse
- d) Probation, offending behaviour, strengths, housing, physical & mental wellbeing, employment
- e) I don't know

6) In PACI-O, we rate offenders' goals in terms of:

- a) Achievability, realism, specification, how measurable are they, and time scale
- b) Importance, likelihood, control, steps to take, happiness, commitment, when it happens
- c) Realism, achievability, importance, commitment, control, and time scale
- d) Happiness, motivation, realism, commitment, how it will be achieved and when
- e) I don't know

7) In group setting, what techniques count towards "facilitation of affect" and why is that important?

- a) Checking in/out, validation, reflection: allows safe environment where offenders can explore negative/positive feelings.
- b) Checking in/out, validation, reflection: allows offenders to develop positive emotional experiences in a safe environment.
- c) Socratic questioning, putting it to the group, nodding: allows a safe environment where offenders can access their emotions.
- d) Checking in/out, validation, reflection: allows a safe environment where offenders can express negative emotions.
- e) I don't know

8) What are the four core skills of Motivational Interviewing?

- a) Active listening, validate, evocation, partnership
- b) Active listening, Socratic questioning, compassion, empathy
- c) Developing change talk, reflect, validate, active listening
- d) Open questioning, affirmation, reflection, summary
- e) I don't know

9) What are the four spirits of Motivational Interviewing?

- a) Partnership, acceptance, evocation and compassion
- b) Empathy, active listening, reflection, and validating
- c) Companionship, validation, empathy, evocation
- d) Mentalising, reflecting, optimism, empathising
- e) I don't know

10) What is change talk and what is sustain talk?

- a) Change talk: a talk that changes the client's motivation: Sustain talk: a type of talking that continues for a period of time if not interrupted.
- b) Change talk: a talk that expresses benefits of change, confidence/ability in making a change. Sustain talk: a talk that argues for reasons to stay the same
- c) Change talk: a talk in which the therapists argue for a change and provides its benefits. Sustain talk: a type of talk in which the offender argues for not changing and not wanting to engage
- d) I don't know

Appendix 12 – Motivational Training Slides/Exercises

Global
Top 100
University



The University of
Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Using motivational techniques,
tools and models to enhance
offenders' engagement in TSP

Mehdi Alemohammad (Trainee Forensic
Psychologist, University of Nottingham)

Today's agenda:

- Introductions (5 minutes)
- Multifactor Offender Readiness Model (MORM) - Vignette exercise (45 minutes)
- Break (5 minutes)
- Personal Aspirations and Concerns Inventory for Offenders (PACI-O) & group engagement strategies – Role play exercise (1 hour)
- Break (10 minutes)
- Motivational Interviewing (MI) – Demonstration, video and role-play (1.5 hours)
- Lunch Break (30 minutes)
- Integrating them all together for TSP – Role play exercise (1 hour)
- Feedback and questionnaire (10 minutes)

Motivation?

Responsivity?

Readiness?

Engagement?



Motivation: No consensus! Usually perceived when offenders express regret, desire to change and sound enthusiastic to enter treatment. In this context, it is when **someone wants to enter treatment and achieve change.**



Responsivity: Focused on **therapist** and **therapy features** and the way interventions are delivered to in order to maximise learning (e.g. consideration of client's age, motivation, ethnicity, gender, personality etc.)



Readiness: Characteristics of client, treatment or setting that promotes treatment engagement, targets risk factors and criminogenic needs and facilitate change.

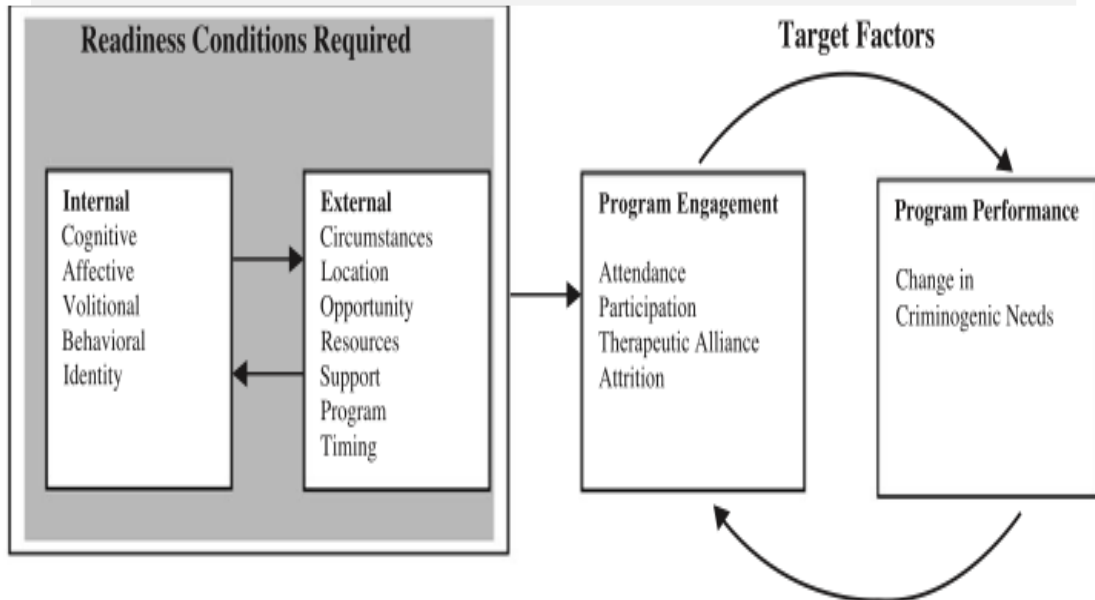


Engagement: Complex. Lack of theory. Engagement in therapy not necessarily the same as engagement in the process of change. Attendance? (refusals, dropouts, completions), participation? Homework or out of sessions behaviour?

The Multifactor Offender Readiness Model (Ward, Day, Howells & Birgden, 2004).

- The MORM was developed to address problems associated with responsivity and **enhance engagement.**
- Treatment readiness of offenders is a function of **internal** and **external** factors.
- The **combination** of these factors will determine whether the offender is ready to engage in treatment.

How does it work?



MORM's Internal Factors:

- **Cognitive**
 - What are the offender's attitude towards the treatment?
 - How hostile is he towards the system/staff?
 - Psychopathic way of thinking.
 - How is his self-efficacy?
- **Affective**
 - How distressed (depressed/anxious) is he?
 - Can he regulate his emotions or is it like a rollercoaster?
 - How does he feel about himself (e.g. shame) and what he has done (e.g. guilt).
- **Behavioural**
 - Does he recognise that he has a problem and needs help with it?
 - Is he competent enough to engage in treatment?
- **Volitional**
 - Is he motivated to achieve constructive goals in his life?
 - Does he have reasonable self-regulative skills to achieve his goals?
- **Identity**
 - Can he see himself living an offence free lifestyle?

- **Opportunities** **MORM's External Factors:**
 - *Is the agency ready to deliver effective treatment?*
 - *Environment: prison/probation/therapy?*
 - *Engage in therapy when they actually need it (waiting times).*
 - *Stages of sentence (near discharge?) OR crisis?*
- **Location**
 - *Can skills be learned in a meaningful/ecologically valid way?*
 - *Distance: Too rural and hard to get to?*
- **Resource**
 - *Trained staff, suitable rooms, positive/welcoming atmosphere etc.*
- **Support**
 - *Family, friends, officers, reward after completion?*
- **Programme Characteristics**
 - *Client involvement in choosing treatment.*
 - *Is he prepared at this point of time? "critical events"*
- **Circumstances**
 - *Treatment mandated or voluntary? Perceived coercion rather than legal pressure.*
 - *Other life stressors.*

Exercise: Read the Vignette



- As part of a group, read the case with Bob
- Is he ready to engage? How would he present/engage?
- Identify the internal & external factors
- What went wrong and how can things improve?

MORM Vignette:

Bob is a 25 years old white British male who has been ordered to attend the TSP as part of his order. His index offence includes ABH, when he was intoxicated at a bar and ended up beating up a member of public after provoking him for no apparent reason and starting a fight. His OASYs indicated that he has issues with alcohol and drugs and has received more than 10 convictions, mostly for violent and acquisitive crimes. Bob was ordered to previously complete TSP, however, he dropped out of the group early and reports suggest that he struggled to adhere to group rules and engage with the programme. Previous reports suggest that he talked over others and dominated group sessions. OASYs also reported that he was recently kicked out of his mother's house due to his criminal life-style and therefore is sofa-surfing, mostly staying at his antisocial "friends".

Jane, the facilitator, meets Bob for the TSP 1:1 induction session in her office, as all the interview rooms are fully booked. Bob comes across as antisocial and rude. He says how he thinks everyone, including those in probation are liars and can't see how stupid programmes such as TSP are going to help him with his problems. He doesn't think he was responsible for the assault, as he believes the other guy started the fight as he had to defend himself. He feels it's a waste of time and money coming here, as he has to travel a

long distance and it takes a lot of his time. After a bit of conversation, Jane realizes that he expressed some hopelessness towards change and future, as he can't imagine himself changing and doesn't know how he could live a "normal" life.

During the sessions, Jane decided to ignore his initial outbursts and bad attitude in order to not collude with him. She focused instead on the historical information and began gathering more information on what happened with Bob at the time of the offence and wasn't much time to focus on other issues. She was able to ask him several questions to assess whether he was motivated and suitable to attend TSP or not, given the patchy attendance in the past. She explained the breaching process, the structure of the sessions and went through the Conditions of Success by explaining how appropriate behaviours should be like in sessions. Bob became visibly quieter and asked "when does this finish" as he needed to be somewhere. Jane replied that she wasn't finished yet. Bob made frustrating noises and eventually the sessions ended.

- 1) What are the internal factors that are impacting Rob's readiness to engage in treatment?
- 2) What are the external factors that are impacting Rob's readiness to engage in treatment?
- 3) Is Bob ready to engage in TSP given the above interaction?
How might he engage/present in the group?

4) What went wrong and how do you think you might overcome or prevent these issues in the future? (e.g. different focus/questions, preparation work).

- Might be helpful to have a “checklist” when we face a client that we think is not ready or is not engaging. Have we considered/targeted/rectified most of these factors in advance? OR are we pathologising the client and labeling them as “resistant”?
- Make sure that we are not using this information to develop an “attrition profile” and exclude patients from treatments; rather engage them in pre-intervention strategies to enhance readiness.
- Remember that readiness to engage is not static and it tends to fluctuate before/during treatment.
- There are questions that you can consider during your contact with the offender to ensure you have explored/targeted MORM areas (questions sheet)

PAST EXPERIENCES OF TREATMENT

What treatments have they done in the past?

What did they think about the treatment itself, its aims and its relevance?

Did they drop out of or discontinue treatment in the past? If so, why?

Was there anything about the therapists that made them feel like discontinuing?

Was there anything the therapist did or said that helped them to stay in treatment?

What else was going on in their lives when they discontinued?

What did they do in the past to manage their urges to disengage so that they could stick with treatment?

How effective were these things?

THOUGHTS

What do they think about their ability to engage in treatment?

What do they think about their ability to benefit from treatment?

FEELINGS

How easy do they find it to talk about their feelings?

How easy do they find it to manage their feelings?

GOALS

What goals do they have in treatment?

Do they think that treatment is consistent with the goals they want to achieve?

SKILLS

What do they think are their strengths when it comes to engaging in treatment?

What do they think are their limitations when it comes to engaging in treatment?

TRAITS

Do they think they have any personality traits that enable treatment engagement?

Do they think they have any personality traits that prevent treatment engagement?

RELATING TO OTHERS

How easy or difficult do they find building relationships with others?

How easy or difficult do they find it to trust others when it comes to talking about deeply personal matters?

OTHER PROBLEMS

Do they have any mental or physical health issues that would create problems engaging in treatment?

CURRENT OR FORTHCOMING TREATMENT

Is there anything about the current/forthcoming treatment that makes them feel like discontinuing or avoiding it? If so, what?

Any practical problems with the location?

What are other people's views about them doing treatment? How much does this matter?

What support from partner/family/friends do they have regarding treatment?

BEHAVIOURS

Once treatment has started, if they were going to drop out, what signs might other people notice?

What would they do now to manage their urges to disengage so that they could stick with treatment?

Various other strategies to enhance engagement:

- TSP Induction preparation:
 - Rationale for treatment,
 - Role-expectations/responsibilities.
 - How treatment evolves and common misconceptions about the treatment.
 - Possible difficulties one may experience during treatment.
 - Offer contract and time limit.
 - Negotiate an agreement on the nature of the problem and the manner it should be addressed in treatment

- Appointment reminders!



- Motivational Activities and Games (Low need for cognition, aversion to thinking deeply about issues) – “201 Icebreaker; West, 1996).



- Vicarious Therapy Pre-training

- Examples of treatment programme (e.g. videos, explanations): To show facilitator/offenders’ “appropriate” behaviour. To also illustrate events that are likely to occur in treatment. Can be examples of actual sessions.



- Therapeutic relationship:
 - Develop and monitor the rapport (e.g. feedback, action plans)
 - Consideration of the therapeutic environment (snacks, chair positions, breaks etc.)
- Facilitation of affect expression:
 - Provide a safe environment in which offenders can explore both positive and negative feelings (checking-in/out, validation, reflection)
- Case management:
 - Provide support with difficult life circumstances; remember desistance does not involve just TSP (e.g. external referrals, discussion with OM/TM, etc.).



Break (5 Minutes)



Personal Aspiration and Concerns Inventory for Offenders (PACI-O)

- Similar to Good Lives Model.
- Research shows it has motivational properties.
- Offenders identify several “concerns” and “aspirations” in different areas of their lives.
- They will set goals, deciding how they want things to turn out.
- They will then rate each of these goals in terms of their importance, likeability, control etc.
- We already do this to some extent in TSP induction sessions.

Life Areas (in order):

- Past, current and future living arrangements
- Close personal relationships (e.g. family, friends, love, partner, intimacy)
- Physical & mental health issues (include substance misuse)
- Recreation (e.g. hobbies, pastimes, spiritual)
- Self-changes and personal improvement (e.g. re-offending, anger/violence)
- Employment, training and financial situation

How to do it:

- Concerns -> Aspirations -> Goals -> Rating
- Rate in terms of:
 - Importance
 - Likelihood
 - Control
 - Steps to take
 - Happiness
 - Commitment
 - When will it happen



Questions (& rate) such as:

- “Can you think about and list any ways (good or bad) in which being in probation may affect things turning out the way you want with regards to this goal?”
- “So overall if you were to offend in the future, how would this affect you achieving this goal?”
- “Do you feel there are obstacles or barriers to overcome before you can achieve this goal?”
- “How do you think your goals compliment and conflict each other?”

Example dialogue:

- **Interviewer** - "The first Area of Life we will discuss is your past, current and future living arrangements, this includes any home or household issues you may have. When you think of this area do any concerns or aspirations come to mind?"
- **Client** – "Yeah I'm worried I'll have nowhere to live on release"
 - *(Interviewer writes this on the Answer Sheet in the box titled 'concern or aspiration'. Then once the offender has had chance to voice his concerns.....)*
- **Interviewer** – "Ok, and what would you like to have happen?"
- **Client** – "I'd like to get my own flat"
 - *(Again the interviewer makes a note of this goal, and proceeds to discuss this whilst working through the rating scales on the Answer Sheet)*
- **Interviewer** – "Ok so how important is it to you that things turn out the way you wish with regards to this goal? On a scale of 0-10, with 0 being not at all important and 10 being very important"
 - *(The interviewer then works through the scales. Sometimes I change the words around a little to stop it sounding too repetitive or to help personalise the scales for the offender)*

- **Group Role-Play Exercise: TSP Induction Session:**
 - *Facilitator, Offender, Observer*
 - *Let's see how PACIO can be integrated into the 1:1 session.*
 - *Observer take note of the processes, adherence and the general interactions.*
 - *Facilitator: explores the offender's concerns, goals and ratings.*
 - *Offender: At a pre-contemplation or contemplation stage, use a recent case you worked with.*

Break (5 minutes)



Motivational Interviewing

- What do you remember?
 - Spirits of MI
 - Core skills/technique
 - Change talk
 - Sustain talk & discord/resistance



Directing -----Guiding-----Following (GP)------(MI)------(Rogerian)



TABLE 1

THE FOUR PROCESSES OF MOTIVATIONAL INTERVIEWING

Phase	Description
Engaging	The provider and patient establish a working relationship. The provider makes it clear that he or she is not there to tell the client what to do.
Focusing	The patient-provider dyad settles on an agenda. The provider maintains patient autonomy by focusing on the patient's most pressing concern.
Evoking	The provider elicits the patient's personal reasons for change. When done successfully, the patient will be voicing the arguments for change.
Planning	This phase is marked by the shift from the "why" of change, to the "when" and "how." The provider guides the patient to come up with the best options for him- or herself.

The Five Principles of MI:

Imagine you are about to sit down with a patient who smokes and suffers from chronic conditions such as hypertension or diabetes.
How would you approach the conversation?

1 Express empathy

"So what I hear you saying is that you are tired of being lectured about smoking. Tell me more about why you feel this way."

2 Develop discrepancy

"What are your goals for the future? How do you see smoking fitting in with your aspirations?"

3 Avoid arguments

"The single best thing you can do for your health is to quit smoking, and I'm here to help

you when you're ready."

4 Roll along when resistance comes

"It sounds like you have thought of a lot of possible stumbling blocks to cutting back your smoking. What could be some of the possible solutions?"

5 Support self-reliance

"I'm really impressed that you are thinking about cutting back on smoking. I want you to know that I believe you can do it. Let's plan to meet in a month to see how things are going."

The Four Spirits of MI

- **Partnership:**
 - Respect client's expertise and perspective
 - Providing conducive (not coercive) environment to change
- **Acceptance:**
 - Affirm the client's right and capacity for self-direction and informed choice
- **Evocation:**
 - Presumed resources and motivation is within the client
 - Enhancing motivation by drawing on client's perceptions, goals and values.
- **Compassion:**
 - Pursuing client's best interest

Quick exercise: Rate the dynamic

- Look at the handout given to you, think about the last “difficult/resistant” client that you worked with.
- Rate the dynamics of the session according to the four spirits of MI.
- What do these ratings tell you might need to happen for the relationship to change?
- What might you do to make that happen?

MI Spirit Exercise

Think about the four areas of MI spirit, then rate where the relationship between you and your last "difficult" clients stands on each of these dimensions:

Partnership

We are working

We are working

We are in the room

against each other (wrestling)

in partnership (dancing)

but not much is happening

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Acceptance

I struggle with the client's

I recognise the client's

I seem indifferent

Choices and press

choices (guiding)

(observing)

for change (directing)

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Evocation

I am presenting the

I am drawing out the

I just let the session go

reasons for change

the client's views on change

wherever it will (following)

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Compassion

I do not care what

I promote this

I am passive regarding

happens to this person

person's welfare

this person's welfare

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Core Skills of MI

- **O** – Open ended questions: 5Ws & H, Can't be answered in yes/no
- **A** – Affirmation: encourage, support, reinforce
- **R** – Reflection: guess at meaning, deepening understanding
- **S** – Summary: summing up what was said and link to previous information

Video clip:

- <https://www.youtube.com/watch?v=-zEpwxJIRQI>



Affirmations:

- Helps with engagement, reduces defensiveness,
 - Most offenders expect to be told all the things they've done wrong
 - Empowering them to recognise own strengths is as just as important
- Not the same as praise (e.g. I'm so proud of you)
- Starts with "you" rather than "I", something good about the person; notice -> acknowledge
- Something specific (being on time today) as opposed to general (you're a good person)
- Affirm positive traits and values hidden beneath their statements.

Exercise:

- Read through the scenarios.
- Identify the strengths and use affirmations.

MI Spirit Exercise

Think about the four areas of MI spirit, then rate where the relationship between you and your last "difficult" clients stands on each of these dimensions:

Partnership

We are working

We are working

We are in the room

against each other (wrestling)

in partnership (dancing)

but not much is happening

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Acceptance

I struggle with the client's

I recognise the client's

I seem indifferent

Choices and press

choices (guiding)

(observing)

for change (directing)

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Evocation

I am presenting the

I am drawing out the

I just let the session go

reasons for change

the client's views on change

wherever it will (following)

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Compassion

I do not care what

I promote this

I am passive regarding

happens to this person

person's welfare

this person's welfare

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Reflections:

- Repeat – Direct re-statement of what the person said
- Rephrase – Saying the same thing in slightly different words
- Paraphrase – Making a guess about the meaning or feeling: might add some more meaning to what was said....different interpretation
- Double sided reflections: Reflect on both sides of the ambivalence. It will end in change talk, using “and” as opposed to “but”
- Metaphors/similies: “kind of like” or “it’s as though”
- Reflect on silence, but always maintain a curious tone of voice/ approach.
- Reflect with direction: “it’s too difficult” vs “it seems you don’t want to come here” vs “it’s very clear that you seek a different type of lifestyle”

Role Play Exercise: (see scenarios)

- Offender, observer, listener
- Decide who will be the offender and who will be the listener.
- “Offender” could think of a scenario or read a passage to get some idea of the context / what he wants to discuss
- The listener can only respond using the reflective comments discussed above.

Reflection Scenarios:

- a) As an offender, you talk about how angry and frustrated you are with probation and don't understand the point of attending these programmes as you've done them before and they were useless.
- b) As an offender in the group, you start talking to the male facilitator and express how women are all just seeking more power and that men always get the short end of the stick.

Global
Top 100
University



The University of
Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Lunch Break (30 min)



Common Traps:



- Assessment/Question-Answer Trap
- Expert Trap
- Labeling Trap
- Premature Focus Trap
- Chat Trap
- Blaming Trap

Change Talk vs Sustain Talk

- Change talk: a talk that expresses disadvantages of not changing, advantages of change. Optimism and intention for change, confidence, ability etc.
- Sustain talk: Reasons to stay the same, inability to make change, pessimism etc.
- But in MI we don't argue for change, resistance is not opposed, but is a signal to change approach
- Resistance is disharmony in collaborative approach, anger and defensiveness, disagreement about focus and target, clash between worker's position and client's ambivalence.

Final things to consider in MI:

- Reflection is you key tool
- Apologise, affirm, shift focus when face resistance
- Talk time – less than 50%
- Reflection/question ratio - > 2:1
- Simple reflection then Complex reflections > 50%
- Open question >70%
- Ask permission before giving advice – ask/tell/ask

Video clip:

- <https://www.youtube.com/watch?v=EvLquWI8aqc>



Demonstration:

- Facilitator will demonstrate a session, using the key MI principles

How to bring it all together for the purpose of TSP session.

- **MORM** provides broad scope of issues that we need to remember/consider that could impact engagement.
- **PACIO-O** provides us with a structure in a TSP induction session and allows us to focus on issues that are important to offenders and help the process of engagement.
- **MI** brings in the “how”, colour/empathy/validation into the session and the therapeutic way to deliver the material successfully.

Final role play exercise: Bringing it altogether.

- Let's see if we can simulate the TSP induction session using our first case, thinking of the MORM.
- Then beginning with the PACI-O
- Using MI throughout.

THANK YOU FOR YOUR TIME! Good
Luck!

LOADING WITTY COMMENT



67% DONE

Appendix 13 – Training Evaluation Form

Thank you for attending the training. I would greatly appreciate it if you take the time to fill in this feedback form.

1. Please rate this training in terms of **Trainer's Expertise, Clarity, Cultural Appropriateness, Time Management, and Responsiveness** to your professional needs. Provide any additional feedback in the **Comments** section. Circle the appropriate numbers.

RATING SCALE: 1 = LOW 3 = MEDIUM 5 = HIGH

Trainer Name(s)	Expertise					Clarity					Culturally Appropriate					Time Management					Responsiveness				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

Comments:

OVERALL EVALUATION OF PRESENTATION

2. Please take a moment to answer the following questions.

What will you do **differently** in your practice/service setting as a result of this training?



What do you feel were the **strengths** of this presentation?



What do you feel were the **weaknesses** of this presentation?



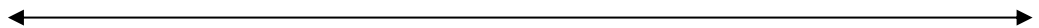
How can I **improve** this presentation?



3. Please rate the following statements using a 1 through 5 scale where:

1 = Disagree Strongly

5 = Agree Strongly



___ The **difficulty level** was about right.

___ I can **apply the information** in my practice/service setting.

___ The presentation met my professional **educational needs**.

___ The trainer **actively involved** me in the learning process.

___ As a result of this training, I feel **more confident** in my practice.

Appendix 14 – Facilitator Interview Questions

Facilitator's (Staff) Name:

Date:

Group Code:

Please rate the training on the following dimensions by putting a cross on the part of the straight line that represents your opinion best.

	Usefulness	
Terrible	_____	Excellent
	Enjoyability	
Terrible	_____	Excellent
	Relevance:	
Terrible	_____	Excellent

1. How did this training meet your professional needs?
2. How did the training impact upon the way you facilitated the TSP sessions?
3. Did you notice any differences in terms of the offenders' engagement in comparison to your previous TSP sessions? What were they? If not, why do you think that was.
4. What changes can be done in the future to enhance offender engagement in your service? (e.g. In terms of the organisation, group itself, facilitators and offenders).

Appendix 15 – Facilitators Interview Transcripts

How did this training meet your professional needs?

Facilitator 1: *It improved my practice, encouraged to explore things further, what they were good at and opened a dialogue. This was especially the case at the beginning of the individual induction sessions. It also led to better rapport and resulted in them feeling more interested. However, I'm not sure if training better or worse would impact the level of dropouts as dropouts were the same as other groups. However, all of our dropouts in the current groups happened externally.*

Facilitator 2: *It definitely did. It helped me to focus on offenders' motivation and to keep offenders in, making it more person-centred and client focused. Having that material in mind made the process more goal-focused. Talking about their goals and using them throughout was helpful to shift focus, focusing on them, directing their concentration and changing decision making. It also changed the way I do individual work, helping them identifying their concerns such as accommodation etc. and helping them with steps towards them. I believe if (material) is in our minds, then we can draw it out of them, but this is not possible in every session and does not marry to what we do. For example, the focus on their offences early on counteracted the material, but we were able to use them in the second module more (e.g. exploring their goals).*

Facilitator 3: *This was different to Core-Skills training, but would have been better if it was stretched over a week, with available worksheets and one topic a day. I remember at the time it was useful, as I thought it covered stuff I had not thought about. It was very informative and picking stuff out. It helped me focus more at the start, having more confidence and build that trust with the offenders. However, I feel it was too much for one day.*

How did the training impact upon the way you facilitated the TSP sessions?

Facilitator 1: *I don't think it had so much of an impact. However, it made the atmosphere in the session a bit more open as opposed to "presenting" the material to them.*

Facilitator 2: *It helped me improve rapport at the beginning phase, for example, helping me questions such as "tell me about yourself and your goals". Previously, the sessions were very structured, but now I put more emphasis on non-offence things like goal, life etc. This resulted in better engagement as the old style can be a bit tedious, however, the new style tends to get more narratives and is more personable. When engagement was going down, I could bring the material discussed in the first induction session (e.g. goals, what's important to them) to enhance engagement. I took the material with me to remember them, but I didn't necessarily follow the exact numbering (with regards to the ratings in PACIO-O).*

Facilitator 3: *It made me more aware and I got to know the guys more, make sure being a bit personable. However, once the group started and the therapeutic relationship with the offenders was developed, it was not as impactful and it was like before. However, it could have also been possible that without this training the group might have collapsed. For example, by being more personable and patient, if offenders didn't want to do something, they didn't have to, but instead I would have used inquisitive questioning (e.g. why do you feel like this) to explore the reasons why.*

Did you notice any differences in terms of the offenders' engagement in comparison to your previous TSP sessions?

Facilitator 1: *I don't think there was that much difference, but we did enjoy the group. No matter how well-trained we are, we are dealing with people, they either take it on board or not, especially if there are external factors present.*

Facilitator 2: *I think there was a difference but it's difficult to say as definite, as for example some had PDs and there were many contributing factors towards this difference which I can't necessarily say it was the result of the training.*

Facilitator 3: *I did not observe any difference; you're going to more or else get same/similar dynamics in such groups. I think this is because most of these are outside of your control, such as court appearances, family issues etc.*

What changes do you think can be done in the future to enhance offender engagement in groups?

Facilitator 1: *Training to have been on more than a day, more in depth, maybe to be used for new facilitators and be explored more on in relation to other areas. Dropouts due to external reasons can't be stopped, but maybe quicker turnaround to finish the group would be helpful, as well as more food/snacks as it can be more engaging and make them feel more like human. Many other facilitators say that.*

Facilitator 2: *More training and also finding out and knowing the internal/external factors before the programme would be helpful (e.g. knowing things that might impact motivation, you can then prepare for them and target them). I also think timing, such as how quickly people get in groups and awareness of their other schedules is important. For example, those that have to unpaid work and the group at the same time, their motivation is often negatively impacted. Often they have no money and get pissed off and leave. I personally liked the scoring of engagement and understanding after each group session, as it quantified their performance, made us work towards helping them increase it. It led to discussions between us to focus on how they engaged (e.g. talking, staying quiet etc.) especially since we don't formally do proper debriefs.*

Facilitator 3: *If they miss session, definitely give them a call, ask why they did not turn up. This might make them recognise that you care, working with them as*

opposed to against them. More training on initial induction sessions would be useful as I believe it is more important for engagement. Letters to be sent out before every sessions as a reminder, as they can often change their numbers, making it difficult to contact them.

Appendix 16 – Facilitators’ Debriefing Sheet

Facilitator of the Thinking Skills Programme (TSP) debriefing form Version 1 01-03-16

Why we did the study

Thank you for participating in this study. The aim of this study was to investigate the effectiveness of a training package that included: readiness techniques, Motivational Interviewing (MI) and exploration of TSP participant’s concerns and goals for the future during the TSP induction session. We expected that facilitators who received training in these specific techniques would have a better retention rate to the TSP than those who didn’t receive any training.

The reason why we thought the training would work is because previous research has also shown that exploring offenders’ current life concerns (e.g. relationships, employment, self- change) as well as identifying their future goals in relation to these issues, while recognising their level of importance and steps required to achieve them could be motivational.

MI techniques can be particularly useful in the TSP as they encourage open questioning, help express empathy, minimise confrontations and resolve ambivalence.

How we did this

To find out whether MI and other training techniques were effective we invited half the facilitators of the TSP in selected sites in London to attend a 4 hour training session, while the other half carried on facilitating the TSP as they normally would. We then compared the two groups (the trained and the untrained group) on how many people attended the sessions, the participant’s enjoyment of the sessions, and how much the people attending the sessions tended to participate in discussions.

We were also interested in your experiences of running the TSP. If you received the training then we were interested in how useful and enjoyable you found the training, and whether you had any feedback for us to consider for future research studies.

What happens now?

When the study has finished I will analyse the results (comparing the experiences of both trained and untrained groups) and write them up. If you would like to find out the results of this study (for example: did this extra training make a difference to the engagement of participants on the TSP?) then I have provided my e-mail address below.

If you have any questions about the study, or any feedback then I’d also like to hear from you.

As a reminder, the data that we collected from you will be stored securely for seven

years and after this time it will be disposed. I would like to remind you again that all the data from this study are anonymised (name removed) and your personal information will not be traceable.

Again, thank you for your participation in our important research.
Mehdi Alemohammad. Email: msxsma@nottingham.ac.uk.

Appendix 17 – Probationers’ Debriefing Sheet

Participant of the Thinking Skills Programme (TSP) debriefing form Version 1 01-03-16

Why we did the study

Thank you for helping us with this study. The aim of this study was to see whether:

- Giving facilitators of the Thinking Skills Programme extra training in techniques that help people feel more motivated helped you get more out of the programme.
- This training helped increase attendance to the TSP
- This training helped you to enjoy the course more.

How we did this

To find this out we invited half of the facilitators of the TSP in selected sites in London to attend a 4 hour training session, while the other half carried on facilitating the TSP as they normally would. We then compared the two groups (the trained group or the untrained group) on how many people attended the sessions, the participant’s enjoyment of the sessions and how much the people attending the sessions tended to participate in discussions.

We were also interested in your experiences of the TSP. Whether you enjoyed it overall, how much you felt you could contribute. We got similar information from the people running the course. As part of the study we could not tell you what group you were in (the trained or the untrained group). If you have any feedback about this then please do contact me.

What happens now?

When the study has finished I will analyse the results (comparing the experiences of both groups) and write them up. If you would like to find out the results of this study (for example: did this extra training make a difference to my experiences of the TSP) then I have provided my e-mail address below.

If you have any questions about the study, or any feedback then I’d also like to hear from you.

As a reminder, the data that we collected from you will be stored securely for seven years and after this time it will be disposed. I would like to remind you again that all the data from this study are anonymised (name removed) and your personal information will not be traceable. Again, thank you for your participation in our important research.

Mehdi Alemohammad. Email: msxsma@nottingham.ac.uk.

Appendix 18 – Facilitators’ GEM

Group Engagement Measure (GEM-27)

Mark J. Macgowan, Ph.D., L.C.S.W.

Please rate each member’s level of engagement throughout the whole TSP programme, including those that did not complete the programme (i.e. dropped out or were removed). Please rate every statement to the best of your recollection - even if you are unsure of your choice. If you are stuck in a choice between two points in the rating scale, choose the first that comes to mind - it is often the most accurate. If you find you have no evidence to rate the member on a statement, leave it blank. As a guide, subscales that are missing more than half their items should be discarded.

Facilitators’ Names _____ Member’s Name: _____

Today’s Date: _____ TSP Group: _____

Please use the following scale to rate each statement:

1-----2-----3-----4-----5
 Rarely or none A little of Some of A good part Most or all
 of the time of the time of the time of the time of the time

Statement	Rating (circle)
I. Attending	
1. The member arrives at or before start time	1 2 3 4 5
2. The member stays until the end of sessions or leaves only for important reasons	1 2 3 4 5
3. The member does not hurry to leave at the end of sessions	1 2 3 4 5
II. Contributing	
4. The member contributes his share of talk time (not too much, not too little)	1 2 3 4 5
5. The member seems to follow and understand what others are saying	1 2 3 4 5
6. The member responds thoughtfully to what all others are saying (not just one or two)	1 2 3 4 5
7. The member verbally interacts with members on topics related to the group's purpose	1 2 3 4 5
8. The member participates in group projects/activities	1 2 3 4 5

Please use the following scale to rate each statement:

1-----	2-----	3-----	4-----	5-----
Rarely or none of the time	A little of the time	Some of the time	A good part of the time	Most or all of the time

Statement

Rating (circle)

III. Relating to worker

9. The member follows the guidance of the facilitator (e.g., discusses what facilitators want group to discuss, is involved in activities suggested by facilitators)	1	2	3	4	5
--	---	---	---	---	---

10. The member shows enthusiasm about contact with facilitators (e.g., demonstrates interest in the facilitators, is eager to speak with facilitators) ¹	1	2	3	4	5
---	---	---	---	---	---

11. The member supports work that the facilitators are doing with other members (e.g., by staying on topic or expanding on discussion) ¹	1	2	3	4	5
---	---	---	---	---	---

IV. Relating with members

12. The members likes and cares for other members	1	2	3	4	5
---	---	---	---	---	---

13. The member helps other group members to maintain good relations with each other (e.g., by encouraging others to work out interpersonal problems, by stopping unproductive arguments among others, by cheering up members and and so forth)	1	2	3	4	5
--	---	---	---	---	---

14. The member helps and encourages other members	1	2	3	4	5
---	---	---	---	---	---

V. Contracting

15. The member expresses continual disapproval about the meeting times	1	2	3	4	5
--	---	---	---	---	---

16. The member expresses continual disapproval about the number of meetings	1	2	3	4	5
---	---	---	---	---	---

17. The member expresses continual disapproval about what the group members are doing together	1	2	3	4	5
--	---	---	---	---	---

VI. Working on own problems

18. The member partializes problems down and works on their parts	1	2	3	4	5
---	---	---	---	---	---

19. The member makes an effort to achieve his particular goals	1	2	3	4	5
--	---	---	---	---	---

20. The member works on solutions to specific problems	1	2	3	4	5
--	---	---	---	---	---

21. The member tries to understand the things he does	1	2	3	4	5
---	---	---	---	---	---

22. The member reveals feelings that help in understanding problems	1	2	3	4	5
---	---	---	---	---	---

Please use the following scale to rate each statement:

1-----	2-----	3-----	4-----	5-----
Rarely or none of the time	A little of the time	Some of the time	A good part of the time	Most or all of the time

23. The member talks with (encourages) others in ways that help them focus on their problems	1	2	3	4	5
24. The member talks with (encourages) others in ways that help them partialize or specify their problems	1	2	3	4	5
25. The member talks with (encourages) others in ways that help them do constructive work on solving their problems	1	2	3	4	5
26. The member challenges others constructively in their efforts to sort out their problems	1	2	3	4	5
27. The member helps others achieve the group's purpose	1	2	3	4	5

Statement	Rating (circle)
VII. Working with others' problems	

Thank you very much for completing the questionnaire. If you have any questions with regards to this questionnaire or the research in general, you can contact me through my email: msxsma@nottingham.ac.uk

Appendix 19 – Probationers’ GEM

Thank you for agreeing to share your experience of this TSP group with us. I would be grateful if you could please take a moment to complete this questionnaire. It should not take more than 10 minutes of your time.

Each question is in relation to your overall experience for the entire duration of the TSP (including individual sessions). If you have not completed the group fully, please rate the items according to what your experience has been so far (e.g. first two sessions).

Please remember that the information that you provide on this questionnaire is completely separate to your probation order and will not impact your progress in any way. Your responses will remain confidential and will become anonymised for the purpose of this study.

Please rate every statement to the best of your recollection - even if you are unsure of your choice. If you are stuck in a choice between two points in the rating scale, choose the first that comes to mind - it is often the most accurate.

Name _____

Today's Date: _____

Please use the following scale to rate each statement:

1-----	-----2-----	-----3-----	-----4-----	-----5
Rarely or none of the time	A little of the time	Some of the time	A good part of the time	Most or all of the time

Statement	Rating (circle)
I. Attending	
1. I arrived at or before start time	1 2 3 4 5
2. I stayed until the end of sessions or left only for important reasons	1 2 3 4 5
3. I did not hurry to leave at the end of sessions	1 2 3 4 5
II. Contributing	
4. I contributed my share of talk time (not too much, not too little)	1 2 3 4 5
5. I followed and understood what others were saying	1 2 3 4 5
6. I responded thoughtfully to what all others were saying (not just one or two)	1 2 3 4 5
7. I verbally interacted with members on topics related to the group's purpose	1 2 3 4 5
8. I participated in group projects/activities	1 2 3 4 5

Please use the following scale to rate each statement:

	1	2	3	4	5
	Rarely or none of the time	A little of the time	Some of the time	A good part of the time	Most or all of the time
Statement	Rating (circle)				
III. Relating to worker					
9. I followed the guidance of the facilitator (e.g., discussed what facilitators wanted group to discuss, was involved in activities suggested by facilitators)	1	2	3	4	5
10. I showed enthusiasm about contact with facilitators (e.g., demonstrated interest in the facilitators, was eager to speak with facilitators) ¹	1	2	3	4	5
11. I supported work that the facilitators were doing with other members (e.g., by staying on topic or expanding on discussion) ¹	1	2	3	4	5
IV. Relating with members					
12. I liked and cared for other members	1	2	3	4	5
13. I helped other group members to maintain good relations with each other (e.g., by encouraging others to work out interpersonal problems, by stopping unproductive arguments among others, by cheering up members and so forth)	1	2	3	4	5
14. I helped and encouraged other members	1	2	3	4	5
V. Contracting					
15. I expressed continual disapproval about the meeting times	1	2	3	4	5
16. I expressed continual disapproval about the number of meetings	1	2	3	4	5
17. I expressed continual disapproval about what the group members were doing together	1	2	3	4	5
VI. Working on own problems					
18. I broke down problems and worked on their parts	1	2	3	4	5
19. I made an effort to achieve my particular goals	1	2	3	4	5
20. I worked on solutions to specific problems	1	2	3	4	5
21. I tried to understand the things I do	1	2	3	4	5
22. I revealed feelings that help in understanding my problems	1	2	3	4	5

Please use the following scale to rate each statement:

1-----2-----3-----4-----5

Rarely or none A little of Some of A good part Most or all
of the time the time the time of the time of the time

Statement	Rating (circle)
VII. Working with others' problems	
23. I talked with (encouraged) others in ways that helped them focus on their problems	1 2 3 4 5
24. I talked with (encouraged) others in ways that helped them break down or specify their problems	1 2 3 4 5
25. I talked with (encouraged) others in ways that helped them do constructive work on solving their problems	1 2 3 4 5
26. I challenged others constructively in their efforts to sort out their problems	1 2 3 4 5
27. I helped others achieve the group's purpose	1 2 3 4 5

Is there anything else that you want to tell us about your experience of the TSP?

Thank you very much for completing the questionnaire. If you have any questions with regards to this questionnaire or the research in general, you can contact me through my email: msxsma@nottingham.ac.uk

Appendix 20 –Research Conference Presentation Slides

Does training staff in motivational techniques improve probationers' engagement in TSP? Feasibility and outcome study.

- Mehdi Alemohammad, Trainee Forensic Psychologist
- Dr Katy Jones (Supervisor)
- Professor McMurran (Supervisor)

Background:

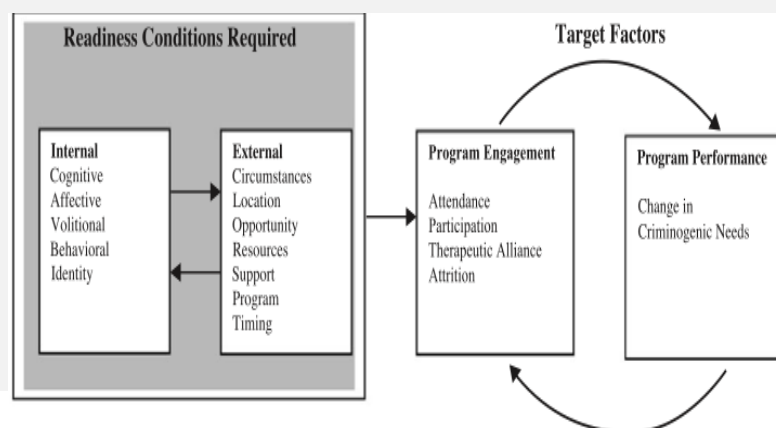
- Offender non-engagement is an endemic problem - dropouts up to 50% (McMurran & Theodosi, 2007).
- Associated with poor treatment effectiveness, financial costs (Sampson et al., 2013), negative impact on staff/offenders' morale (McMurran & Ward, 2010) and higher recidivism (McMurran & Theodosi, 2007).
- Complex issue to overcome, considering many external contributing factors (accommodation, location, court-appearances, financial difficulties; Ward et al., 2004).

Background (continue)

- Modifying the programme and supporting offenders and/or staff (e.g. training) might enhance engagement.
- Promising models/methods such as Multifactor Offender Readiness Model (MORM; Ward et al., 2004), Personal Aspirations and Concerns Inventory for Offenders (PACI-O; Campbell et al., 2010) and Motivational Interviewing (MI; Miller & Rollnick, 1991) have shown to improve engagement.

Multifactor Offender Readiness Model (MORM)

- Treatment readiness of offenders is a function of internal and external factors. If these are supported, engagement increases.



MORM's Internal Factors:

- **Cognitive**
 - What are the offender's attitude towards the treatment?
 - How hostile is he towards the system/staff?
 - Psychopathic way of thinking.
 - How is his self-efficacy?
- **Affective**
 - How distressed (depressed/anxious) is he?
 - Can he regulate his emotions or is it like a rollercoaster?
 - How does he feel about himself (e.g. shame) and what he has done (e.g. guilt).
- **Behavioural**
 - Does he recognise that he has a problem and needs help with it?
 - Is he competent (e.g. LD, literacy) enough to engage in treatment?
- **Volitional**
 - Is he motivated to achieve constructive goals in his life?
 - Does he have reasonable self-regulative skills to achieve his goals?
- **Identity**
 - Can he see himself living an offence free lifestyle?

MORM's external Factors:

- **Opportunities**
 - Is the agency ready to deliver effective treatment?
 - Environment: prison/probation/therapy?
 - Engage in therapy when they actually need it (waiting times).
 - Stages of sentence (near discharge?) OR crisis?
- **Location**
 - Can skills be learned in a meaningful/ecologically valid way?
 - Distance: Too rural and hard to get to?
- **Resource**
 - Trained staff, suitable rooms, positive/welcoming atmosphere etc.
- **Support**
 - Family, friends, officers, reward?
- **Programme Characteristics**
 - Client involvement in choosing treatment.
 - Is he prepared at this point of time?
- **Circumstances**
 - Treatment mandated or voluntary? Perceived coercion rather than legal pressure.
 - Other life stressors.

MORM Research

- MORM factors consistently associated with treatment non-completions amongst offenders (Sturgess et al., 2015).
- Internal factors have shown to predict group refusals, dropouts and completion rates in high secure forensic psychiatric settings (Alemohammad et al., 2016).
- Participation in MORM groups have shown to enhance subsequent treatment entry (69% vs 27%) and increase completion rates (68% vs 59%) of probationers in drug programmes (Roque & Lurigio, 2009).

MORM Research

- The effectiveness of web-based training programmes based on MORM have shown to be less feasible in probation settings (high workload, less enjoyable, technical issues, Clarke et al., 2015).
- Therefore, increasing facilitators' awareness of these factors could lead to early intervention, but more traditional/interactive style is warranted.

Personal Aspirations and Concerns Inventory for Offenders (PACI-O)

- Similar to the Good Lives Model (Ward & Stewart, 2003).
- Based on Theory of Current Concerns and its assessment, Personal Concerns Inventory (PCI; Klinger & Cox, 2011).
- Goal pursuit is a natural response towards a certain concern/problem in life.
- PCI helps clients identify these, plan goals and rate their goals in terms of attainability, control, commitment and happiness etc.
- This process has shown to increase motivation and engagement.

PACI-O Research

- Older variations of PACI-O have been reported by prisoners and staff to have motivational properties (McMurran et al., 2008).
- Sex offender prisoners who refused treatment were more likely to show more interest, motivation, help-seeking behaviours with regards to treatment participation (Theodosi & McMurran, 2006)
- Sex offender prisoners that completed PACI-O were marginally more engaged in the ETS (Sellen et al., 2013)
- Outpatient PD offenders that completed PCI attended more individual and group sessions and were more engaged (McMurran et al., 2013).

PACI-O Research

- Qualitative: Probationers struggled to explicitly remember the contents of PACI-O and its impact on their motivation/behaviour, but their accounts of desistance process closely matched adaptive profile of PACI-O, suggesting an implicit impact (Palmer et al., 2013).
- Although PACI-O is shorter, it still takes about 80-90 minute to complete and not realistic to be integrated in probation setting on a large scale.
- However, potentially training staff to become aware of its motivational mechanisms might still increase engagement.

Motivational Interviewing (MI)

- Client-centred, directive method for enhancing intrinsic motivation to change by exploring and re-solving ambivalence” (Miller & Rollnick, 2002, p. 25).
- Closely associated with Stages of Change model (Prochaska & DiClemente, 1983) and Self-Determination Theory (Ryan & Deci, 2000; Markland, Ryan, Tobin, & Rollnick, 2005).
- Effective for enhancing offender motivation and treatment engagement (McMurrin, 2009, Own review).

MI Training Research

- MI training, even in short doses, can lead to increased knowledge and competency (Madson et al., 2009; Soderland et al., 2011).
- However, baseline level of competency, readiness and motivation are important to achieve change in practice (Barwick et al., 2012) . Supervision and coaching are required to sustain the effect (Schwalbe et al., 2014).
- MI training has shown to enhance probation officers' empathy and adherence to the model (Walters et al., 2010). Even a one day training has shown to improve officers' knowledge of MI (Kleinpeter et al., 2011).

Rationale:

- 1) MORM to structure the content of sessions and allow for early intervention. 2) PACI-O helps rapport and insight. 3) MI helps delivering the material in an empathic and motivational manner.
- Feasibility and impact of delivering a training package based on these three principles to facilitators and to assess whether it enhances probationers' engagement in TSP.
- Feasibility criteria: 80% recruitment, retention, follow-up completions and acceptability/usefulness.
- Engagement: Assessed through Group Engagement Measure (Macgowan, 1997), facilitators' ratings, attendance and interviews.

Method – Design, Setting, Participants

- Single blinded (probationers) two-arm parallel cluster RCT.
- Ethics: UoN, NOMS and CRC ethics committee boards.
- Setting: RISE – delivering accredited group programmes to probationers in London. We chose North-East and West sites – (100 referrals each annually, good distance apart).
- Participants: Planned 8-10 facilitators that delivered TSP. 40-50 probationers ordered to complete TSP as part of their order. Recruiting over 5 months.

Method - Interventions

- **Thinking Skills Programme (TSP; Harris & Riddy, 2008) – Control condition/TAU**
 - 15 x 2.5 hours CBT-based group sessions, 1 x 1 hour induction session and 3 x 1 hour review sessions.
- **Training + TSP – Trained condition**
 - Training was piloted with psychologists at a forensic outpatient PD service. Adjustments made.
 - 5 hours training, introducing MORM, practical tips, PACI-O, MI, didactic, role-play, group exercises, videos etc.
 - Delivered at their own site, handouts, quizzes.

Method - Measures

- Baseline Measures:
 - Facilitators' demographic – age, sex, ethnicity, education, experience, discipline
 - Probationers' demographic - age, ethnicity, convictions
 - Knowledge questionnaire – 10 items assessing pre-existing knowledge before training and change in knowledge after.
- Outcome Measures:
 - Training Evaluation Questionnaire - 1-5 ratings.
 - Semi-structured interview - 15 minute, impact of training.
 - Probationers' attendance – nDelius register records.
 - Engagement rated by facilitators –1-5 rating (unstandardised)
 - Probationers' engagement via GEM-27 – At the end of TSP.

Method - Procedure

- Randomisation: Simple coin toss. All facilitators in both site were approached. Consent + information sheet, demographic + knowledge questionnaires administered.
- Arranged training date before commencement of TSP with facilitators in the experimental arm. Training lasted 5 hours. 4 days later, they completed training evaluation and the knowledge questionnaire.
- Two TSP groups per arm. Approached probationers during 1:1 inductions. Consent + information sheet + demographic info on nDelius.

Method – Procedure (continue)

- Once TSPs started, facilitators recorded attendance and rated each probationers' engagement/understanding (1-5) and relayed the info to the researcher.
- After each TSP group, facilitators provided probationers with GEM-27 to rate their own overall engagement. The offender manager of probationers that could not be reached were contacted to provide them with GEM.
- The researcher met the facilitators to complete GEM and rate probationers's overall engagement, including those that dropped out.

Method – Procedure (continue)

- Researcher also met the facilitators in the trained site subsequently and completed the interviews.
- Recruitment, retention, follow-up attendance rates, facilitators' ratings of the training, as well as their feedback during the interview were analysed to establish the feasibility.
- Mean scores of attendance, engagement ratings (un-standardised) and GEM-27 and estimated effect sizes were also calculated.

Results:

- Demographic (facilitators) – 8 total, **Trained: 3, Control: 5**
 - Mean Age: – **T: 40** versus **C: 42**,
 - Sex: **T: 1/3 Male** versus **C: 2/5 Males**
 - Ethnicity: **T: 2/3 Black British** versus **C: 3/5 White British**
 - Discipline: **T: Probation, Psychology, Music** versus **C: 3 x Teaching, 2 x Probation**
 - Education: **T: 2 x below degree, 1 x degree** versus **C: 2 x below degree, 1 degree, and 2 x Masters or above**
 - Experience: **T: 2 x less than a year, 1 x 3 years or more** versus **C: 2 x less than a year, 3 x 3 years or more.**
 - Previous Knowledge of Training: **T: 2.6/10** versus **C: 3.2/10**
 - Post training knowledge (Trained condition only): **T: 6.33**

Results:

- Demographic (probationers): 40 total, **Trained: 20, Control: 20**
 - Mean Age: – **T: 26** versus **C: 24**
 - Consented: **T: 85%** versus **C: 60%**
 - Ethnicity: **T: 35% White, 20% Asian, 10% Black, 35% refused/unknown** versus **C: 25% White, 10% Asian, 10% Black, 55% refused/unknown**
 - Mean No of Convictions (inc IO): **T: 2.5** versus **C: 4**

Results: Feasibility

- Facilitators recruitment, retention, follow-up rates all 100%.
- Acceptability: Overall positive. Increased knowledge and average ratings of ~ 80% 4 days after the training. After TSP, ratings fell to ~ 72%.
- Interview themes: “Training helps rapport”, “effects more profound in 1:1 and at the start of TSP”, “needs to be longer”, “external factors have more influence”, “not sure if training impacted engagement”, “dropouts were seen as main engagement outcomes”. Could recall some of the material implicitly.

Results: Engagement

- Session turnouts:
 - Attendance (out of 13) – T: 5.7, C: 6.25 – $d = 0.1$, NS
 - Dropouts – T: 11/17 (64%), C: 7/12 (58%)
 - Completions – T: 6/17 (36%), C: 5/12 (42%)
- Session Engagement Rating:
 - T: 3.72/5, C: 3.78/5 – $d = 0.07$, NS
- Overall Engagement (GEM):
 - Facilitators GEM: T: 3.86/5, C: 3.11/5 – $d = 0.76$, NS
 - Probationers GEM: T: 4.5/5, C: 4.25/5 – $d = 0.61$, NS

Discussion

- It appears that it is partially feasible to carry out a larger-scale RCT.
 - Two believed it did not have a significant impact on engagement, one did not think it had much of an impact on TSP facilitation
 - Large number of probationers' refusals, dropouts and follow-up failures, impacting future practicalities – contingency management, more recruitment over longer period.
 - Organisational reformations/changes challenge the smooth running of RCTs.

Discussion

- Poor follow-up co-operation, Attrition bias, Contacting offenders better option.
- Aspects of training (e.g. MORM, PACI-O) not realistic/practical – burnout (Finney et al., 2013), increased workload (Kirtan & Guillaume, 2015), treatment integrity. Basic competencies for MI.
- Short-term MI trainings do not always lead to change in practice (Miller & Mount, 2001; Simpson et al., 2005)
- Mixed findings in terms of the training enhancing probationers' engagement:

Discussion

- Attendance difference negligible, possibly due to variance. Many errors on sending appointments, selections and groups start dates. Control: large number of previous dropouts. Higher refusals.
- Poor determinants of engagement? (Holdsworth et al., 2014), No correlation.
- Control had more experience and better education, shown to moderate MI's effect (Lundahi et al., 2010; Rubak et al., 2005). Also observed to remind probationers of their appointments (Ogrodniczuk et al., 2005).
- Many external factors were suggested to have bigger impact (MORM?; Ward et al., 2004).

Discussion

- Engagement ratings -> no difference. Facilitators not good at judging engagement in an un-standardised way? Scoring safe, performance bias. Correlated with GEM-27 (facilitators). Independent raters, blinding.
- GEM-27 (facilitators) -> Less pressure/bias, more sensitive.
- GEM-27 (probationers) -> Pressure, fear, deception. Not correlated with facilitators' GEM, but with convictions. Bias alone cannot explain due to blinding. Probationers' self-report better at predicting outcome (Skeem et al., 2007; Walter et al., 2010). Social desirability better predictor of treatment attendance/outcome than the actual instruments (Zemore, 2012)
- Use of validity measures in the future.

Conclusion

- Crucial modifications are needed: countering design bias, changes to the training, better preparation and support from the organisation.
- But resources are lacking in such environments and conducting research is not often a priority. Staff burnout, pressure, workload.
- Isolating external factors and evaluating their effects on engagement empirically is difficult and requires multiagency collaborative work.
- Reliance on attendance or opinions of offenders engagement might not be informative and there is a need to work towards utilising standardised measures to enhance engagement.

References

- McMurrin M, Theodosi E, (2007). Is treatment non-completion associated with increased reconviction over no treatment? *Psychology, Crime & Law* 13: 333–343. DOI:10.1080/10683160601060374
- Sampson, C. J., James, M., Huband, N., Geelan, S., & McMurrin, M. (2013). Cost implications of treatment non-completion in a forensic personality disorder service. *Criminal Behaviour and Mental Health*, 23(5), 321–335.
- McMurrin, M., & Ward, T. (2010). Treatment readiness, treatment engagement and behaviour change. *Criminal Behaviour and Mental Health*. <http://doi.org/10.1002/cbm.762>
- Ward, T., Day, A., Howells, K., & Birgden, A. (2004). The multifactor offender readiness model. *Aggression and violent behavior*, 9(6), 645–673.
- Campbell, J., Sellen, J. L., & McMurrin, M. (2010). Personal aspirations and concerns inventory for offenders: developments in the measurement of offenders' motivation. *Criminal Behaviour and Mental Health : CBMH*, 20, 144–157. <http://doi.org/10.1002/cbm.761>
- Miller, W. R. and Rollnick, S. (eds) (1991) *Motivational Interviewing: Preparing People to Change Addictive Behaviour*, New York, The Guilford Press. Whitehead,
- Sturgess, D., Woodhams, J., & Tonkin, M. (2015). Treatment Engagement From the Perspective of the Offender: Reasons for Noncompletion and Completion of Treatment--A Systematic Review. *International Journal of Offender Therapy and Comparative Criminology*. <http://doi.org/10.1177/0306624X15586038>
- Alemohammad, M., Wood, J. L., Tapp, J., Moore, E., & Skelly, A. (2016). Support for the predictive validity of the multifactor offender readiness model (MORM): forensic patients' readiness and engagement with therapeutic groups. *Criminal Behaviour and Mental Health*.
- Roque, L., & Lurigio, A. J. (2009). An outcome evaluation of a treatment readiness group program for probationers with substance use problems. *Journal of Offender Rehabilitation*, 48(8), 744–757. <http://dx.doi.org/10.1080/10509670903288046>. Rosenbaum,

References

- Clarke, M., Jinks, M., & McMurren, M. (2015). Readiness Enhancement Management Strategies (REMS): a proof of concept and evaluation feasibility study of staff training to improve service engagement by people with personality difficulties. *Journal of Psychiatric and Mental Health Nursing*, n/a-n/a. <http://doi.org/10.1111/jpm.12214>
- Ward T, Stewart C. A. (2003). Criminogenic needs and human needs: A theoretical model. *Psychology, Crime & Law* 9: 125–143.
- Klinger, E. & Cox, W.M. (2011). The Motivational Structure Questionnaire, Personal Concerns Inventory and their variants: Psychometric properties. In W.M. Cox & E. Klinger (Eds.), *Handbook of Motivational Counselling: Goal-based approaches to assessment and intervention with addiction and other problems* (pp.205–232).
- McMurren, M., Theodosi, E., Sweeney, A., & Sellen, J. (2008). What do prisoners want? Current concerns of adult male prisoners. *Psychology, Crime & Law*, 14(February 2015), 267–274. <http://doi.org/10.1080/10683160701770161>
- Theodosi, E., & McMurren, M. (2006). Motivating convicted sex offenders into treatment: A pilot study. *British Journal of Forensic Practice*, 8,28?35. doi:10.1108/14636646200600017
- Sellen, J. L., Gobbett, M., & Campbell, J. (2013). Enhancing treatment engagement in sexual offenders: A pilot study to explore the utility of the Personal Aspirations and Concerns Inventory for Offenders (PACI-O). *Criminal Behaviour and Mental Health*, 23(June), 203–216. <http://doi.org/10.1002/cbm.1868>
- McMurren, M., Cox, W. M., Coupe, S., Whitham, D., & Hedges, L. (2013). The addition of a goal-based motivational interview to standardised treatment as usual to reduce dropouts in a service for patients with personality disorder: a feasibility study. *Trials*, 11(1), 98. <http://doi.org/10.1186/1745-6215-11-98>
- Palmer, C. M., Heggs, D., & Sellen, J. (2013). Exploring motivation and personal change in males serving probation orders within the community: A qualitative pilot study, (August).

References

- Miller WR, Rollnick S (2002) *Motivational Interviewing: Preparing People for Change*. New York: Guilford Press.
- Markland, D., Ryan, R. M., Tobin, V. J., & Rollnick, S. (2005). Motivational Interviewing and Self-Determination Theory. *Journal of Social and Clinical Psychology*. <http://doi.org/10.1521/jscp.2005.24.6.811>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, 55(1), 68–78. <http://doi.org/10.1037/0003-066X.55.1.68>
- McMurren, M. (2009). Motivational interviewing with offenders: A systematic review. *Legal and Criminological Psychology*, 14, 83–100. <http://doi.org/10.1348/135532508X278326>
- Madson, M. B., Loignon, A. C., & Lane, C. (2009). Training in motivational interviewing: A systematic review. *Journal of substance abuse treatment*, 36(1), 101-109.
- Söderlund, L. L., Madson, M. B., Rubak, S., & Nilsen, P. (2011). A systematic review of motivational interviewing training for general health care practitioners. *Patient education and counseling*, 84(1), 16-26.
- Barwick, M. A., Bennett, L. M., Johnson, S. N., McGowan, J., & Moore, J. E. (2012). Training health and mental health professionals in motivational interviewing: A systematic review. *Children and Youth Services Review*, 34(9), 1786-1795.
- Schwalbe, C. S., Oh, H. Y., & Zweben, A. (2014). Sustaining motivational interviewing: A meta-analysis of training studies. *Addiction*, 109(8), 1287-1294.
- Kleinpeter, C., Koob, J. J., & Chambers, R. (2011). Motivational Interviewing Training for Probation Officers in California. *International Journal of Learning*, 18(2).

References

Walters, S. T., Vader, A. M., Nguyen, N., Harris, T. R., & Eells, J. (2010). Motivational interviewing as a supervision strategy in probation: A randomized effectiveness trial.

Macgowan, M. J. (1997). A Measure of Engagement for Social Group Work. *Journal of Social Service Research*, 23(2), 17–37.
http://doi.org/10.1300/J079v23n02_02

Harris, D., & Riddy, R. (2008). *The thinking skills programme: Theory manual* (Interventions and Substance Misuse Group). London, UK: Ministry of Justice.

Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C. S. (2013). Organizational stressors associated with job stress and burnout in correctional officers: a systematic review. *BMC Public Health*, 13(1), 82.

Kirton, G., & Guillaume, C. (2015). Employment Relations and Working Conditions in Probation after Transforming Rehabilitation. *London: Queen Mary University of London*.

Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). Offender engagement in group programs and associations with offender characteristics and treatment factors: A review. *Aggression and violent behavior*, 19(2), 102-121.

Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: Twenty-five years of empirical studies. *Research on Social Work Practice*.

Rubak, S., Sandbæk, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: a systematic review and meta-analysis. *Br J Gen Pract*, 55(513), 305-312.

Ogrodniczuk, J. S., Joyce, A. S., & Piper, W. E. (2005). Strategies for reducing patient-initiated premature termination of psychotherapy. *Harvard Review of Psychiatry*, 13, 57–70. <http://doi.org/10.1080/10673220590956429>

References

Skeem, J. L., Louden, J. E., Polaschek, D., & Camp, J. (2007). Assessing relationship quality in mandated community treatment: blending care with control. *Psychological Assessment*, 19, 397–410.

Zemore, S. E. (2012). The effect of social desirability on reported motivation, substance use severity, and treatment attendance. *Journal of substance abuse treatment*, 42(4), 400-412.

Thank you for your time

Appendix 21 - BPS DFP Conference Abstract (accepted)

Submission #7822

Title:

The effectiveness of motivational interviewing with offenders: A systematic review and meta-analysis of randomised controlled trials.

Abstract:

Purpose: We conducted a meta-analysis and systematically reviewed the effectiveness of motivational interviewing (MI) with offenders in relation to alcohol consumption, substance misuse, engagement, and recidivism.

Background: In a systematic review almost a decade ago, McMurran (2009) reported mixed findings with regards to the effectiveness of MI with offenders. Only about half of these studies were randomised controlled trials and no meta-analysis was conducted to draw firm conclusions about MI's effectiveness. In the current review, we address these limitations and work towards a more definitive conclusion.

Methods: Several databases were utilised, using different variations of terminologies such as "MI", "RCT" and "offenders". Twenty-one RCTs were included in this study. RCT studies with offender samples that investigated any variations of MI, compared to no intervention or treatment as usual were included. Studies that recruited non-forensic sample, composite treatment packages that included MI and another form of active treatment were excluded. The outcome data from several studies were synthesised and the remaining studies were qualitatively reviewed.

Conclusion: The results of the meta-analysis revealed that for alcohol consumption, MI showed poorer outcome in comparison to control, while there was no effect in relation to substance misuse variable. With respect to recidivism, MI showed some improvement in comparison to control. Though it is widely used in forensic settings, MI's effectiveness is variable according to each outcome of interest. These results are discussed further with treatment integrity, intensity and age as moderating variables.

Type:

Individual Paper

Authors:

Dr Mehdi Alemohammad (University of Nottingham)

Dr Katy Jones (University of Nottingham)

Prof David Daley (University of Nottingham)

Appendix Twenty-Two – Interview Transcript Analysis

How did this training meet your professional needs?

Facilitator 1: It improved my practice, encouraged to explore things further, what they were good at and opened a dialogue. This was especially the case at the beginning of the individual induction sessions. It also led to better rapport and resulted in them feeling more interested. However, I'm not sure if training better or worse would impact the level of dropouts as dropouts were the same as other groups. However, all of our dropouts in the current groups happened externally.

Facilitator 2: It definitely did. It helped me to focus on offenders' motivation and to keep offenders in, making it more person-centred and client focused. Having that material in mind made the process more goal-focused. Talking about their goals and using them throughout was helpful to shift focus, focusing on them, directing their concentration and changing decision making. It also changed the way I do individual work, helping them identifying their concerns such as accommodation etc. and helping them with steps towards them. I believe if (material) is in our minds, then we can draw it out of them, but this is not possible in every session and does not marry to what we do. For example, the focus on their offences early on counteracted the material, but we were able to use them in the second module more (e.g. exploring their goals).

Facilitator 3: This was different to Core-Skills training, but would have been better if it was stretched over a week, with available worksheets and one topic a day. I remember at the time it was useful, as I thought it covered stuff I had not thought about. It was very informative and picking stuff out. It helped me focus more at the start, having more confidence and build that trust with the offenders. However, I feel it was too much for one day.

How did the training impact upon the way you facilitated the TSP sessions?

Facilitator 1: I don't think it had so much of an impact. However, it made the atmosphere in the session a bit more open as opposed to "presenting" the material to them.

Facilitator 2: It helped me improve rapport at the beginning phase, for example, helping me questions such as "tell me about yourself and your goals". Previously, the sessions were very structured, but now I put more emphasis on non-offence things like goal, life etc. This resulted in better engagement as the old style can be a bit tedious, however, the new style tends to get more narratives and is more personable. When engagement was going down, I could bring the material discussed in the first induction session (e.g. goals, what's important to them) to enhance engagement. I took the material with me to remember them, but I didn't necessarily follow the exact numbering (with regards to the ratings in PACIO-O).

Facilitator 3: It made me more aware and I got to know the guys more, make sure being a bit personable. However, once the group started and the therapeutic relationship with the offenders was developed, it was not as impactful and it was like before. However, it could have also been possible that without this training the group might have collapsed. For example, by being more personable and patient, if

Jones Katy 17/3/17 13:17

Comment [1]: Yellow edits: What the training actually did for the facilitator:

- opened a dialogue
- made the process goal focussed
- focused discussion at the start
- increased confidence.

Jones Katy 17/3/17 13:18

Comment [2]: Timing of the effect of the training.

Jones Katy 17/3/17 13:22

Comment [3]: Seems to work best in individual sessions.

Jones Katy 17/3/17 13:24

Comment [4]: Was perceived to improve rapport

Jones Katy 17/3/17 13:21

Comment [5]: Dropouts more of a challenge. Perceived to often occur 'externally' i.e. beyond the facilitator's control. Raises an interesting question as to whether engagement should be measured in terms of dropouts.

Jones Katy 17/3/17 13:19

Comment [6]: This is what it did for the client- I think it's subtly different to what the training did for the facilitator. You might want to explore these in parallel as it had a dual effect.

Jones Katy 17/3/17 13:23

Comment [7]: Seems to work best in individual sessions

Jones Katy 17/3/17 13:20

Comment [8]: Adjustments for future training.

Jones Katy 17/3/17 13:19

Comment [9]: Timing of the effect of the training.

Jones Katy 17/3/17 13:24

Comment [10]: Rapport? Group

Jones Katy 17/3/17 13:23

Comment [11]: Was perceived to improve rapport

Jones Katy 17/3/17 13:23

Comment [12]: Timing of the effect of the training.

Jones Katy 17/3/17 13:25

Comment [13]: Rapport

Jones Katy 17/3/17 13:25

Comment [14]: Works better for individual sessions.

Good quote to use as brings in ideas of rapport as well.

offenders didn't want to do something, they didn't have to, but instead I would have used inquisitive questioning (e.g. why do you feel like this) to explore the reasons why.

Did you notice any differences in terms of the offenders' engagement in comparison to your previous TSP sessions?

Facilitator 1: I don't think there was that much difference, but we did enjoy the group. No matter how well-trained we are, we are dealing with people, they either take it on board or not, especially if there are external factors present.

Facilitator 2: I think there was a difference but it's difficult to say as definite, as for example some had PDs and there were many contributing factors towards this difference which I can't necessarily say it was the result of the training.

Facilitator 3: I did not observe any difference; you're going to more or else get same/similar dynamics in such groups. I think this is because most of these are outside of your control, such as court appearances, family issues etc.

What changes do you think can be done in the future to enhance offender engagement in groups?

Facilitator 1: Training to have been on more than a day, more in depth, maybe to be used for new facilitators and be explored more on in relation to other areas. Dropouts due to external reasons can't be stopped, but maybe quicker turnaround to finish the group would be helpful, as well as more food/snacks as it can be more engaging and make them feel more like human. Many other facilitators say that.

Facilitator 2: More training and also finding out and knowing the internal/external factors before the programme would be helpful (e.g. knowing things that might impact motivation, you can then prepare for them and target them). I also think timing, such as how quickly people get in groups and awareness of their other schedules is important. For example, those that have to unpaid work and the group at the same time, their motivation is often negatively impacted. Often they have no money and get pissed off and leave. I personally liked the scoring of engagement and understanding after each group session, as it quantified their performance, made us work towards helping them increase it. It led to discussions between us to focus on how they engaged (e.g. talking, staying quiet etc.) especially since we don't formally do proper debriefs.

Facilitator 3: If they miss session, definitely give them a call, ask why they did not turn up. This might make them recognise that you care, working with them as opposed to against them. More training on initial induction sessions would be useful as I believe it is more important for engagement. Letters to be sent out before every sessions as a reminder, as they can often change their numbers, making it difficult to contact them.

Jones Katy 17/3/17 13:26

Comment [15]: Good to quote to use. Focus on external factors again. Idea that external forces (beyond the facilitator's control) influence engagement more powerfully.

Jones Katy 17/3/17 13:27

Comment [16]: Difficult to measure/capture changes of training. Perhaps changes are more subtle? Something to discuss in your thesis especially RE: measurement.

Jones Katy 17/3/17 13:27

Comment [17]: Personality disorders attributed to engagement of offenders.

Jones Katy 17/3/17 13:28

Comment [18]: Group dynamic affects engagement. Perception that individual relationships are easier to build, easier to influence?

Jones Katy 17/3/17 13:28

Comment [19]: Idea that external forces (beyond the facilitator's control) influence engagement more powerfully.

Jones Katy 17/3/17 13:29

Comment [20]: Length of training- need longer

Jones Katy 17/3/17 13:29

Comment [21]: External forces influencing engagement.

Jones Katy 17/3/17 13:30

Comment [22]: Timing of group

Jones Katy 17/3/17 13:30

Comment [23]: Timing of group

Jones Katy 17/3/17 13:30

Comment [24]: External factors influencing engagement

Jones Katy 17/3/17 13:30

Comment [25]: Goals

Jones Katy 17/3/17 13:30

Comment [26]: Aids in debriefing

Jones Katy 17/3/17 13:31

Comment [27]: Building the relationship is important.

Jones Katy 17/3/17 13:31

Comment [28]: Timing again- works better at the start.

Appendix 23 – Proposed Nested Model of Engagement

